AMPLIFYING FLORIDA EMS VOICES:

Results of the 2026 Annual Agency Survey

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Front Matter

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Executive Summary

The 2026 Annual Florida EMS Agency Survey (Survey) was conducted by the Florida Center for Emergency Medical Services (FL-CEMS) at the University of South Florida (USF) on behalf of the Department of Health's (DOH) Bureau of Emergency Medical Oversight (BEMO), between February 26 and May 5, 2026. Its purpose is to give the state a current, system-wide picture of how Florida's emergency medical services (EMS) agencies operate and the challenges they face, supporting statewide planning and the Department's EMS State Plan. Florida licenses more than 300 ground-transport EMS agencies, and 214 of the 308 agencies eligible at the time the survey opened submitted usable responses, a response rate of 69.5 percent. Together with a handful of agencies licensed after that date and several out-of-state agencies that also operate in Florida, the analytic sample totals 230 agencies. A comparison of agencies that responded against those that did not found no meaningful difference by call volume, rural status, or region; the one exception was service mode, since air ambulance services responded at a substantially lower rate than ground agencies, which is one reason this report treats ground and air services separately throughout. The survey was redesigned in 2026 into a modular format that let agencies complete sections separately rather than all at once, and response rates on questions asked the same way in both years improved modestly over 2025.

The **responding agencies** paint a fairly consistent picture of how EMS is organized in Florida. About two in three are fire departments, with the remainder split between private companies, hospital-based services, and other government providers. Nearly all are licensed to provide advanced life support, and the large majority transport patients by ground rather than by air. One organizing idea recurs across almost every chapter of this report: the agencies surveyed range enormously in size, from a handful that handle under 200 calls a year to a few major metropolitan systems handling more than 300,000, and the report sorts agencies into five size groups for fair comparison. That size grouping turns out to be the single most powerful explanation for differences across the system. Larger agencies are more likely to have flexible daily staffing, to spend more on physician medical direction, to run broader mental health support programs, to participate in regional data systems and health information exchanges (HIE), to belong to disaster coalitions, and to have adopted newer clinical and administrative practices generally. Where this pattern breaks, that is informative too: measures such as workforce shortage, hemorrhage control protocols, and infectious disease training are essentially flat no matter how large or small the agency is, suggesting either a baseline the whole system has already met or decisions made by individual medical directors rather than organizational resources.

Workforce capacity is the most consistently cited constraint in the report, concentrated specifically in paramedics rather than emergency medical technician (EMTs). Three in five agencies report an active staffing shortage, and nearly six in ten report a paramedic shortage specifically, compared with about one in five reporting an EMT shortage. The data suggest this is primarily a recruitment problem rather than a retention problem: agencies offering higher starting pay report meaningfully fewer vacancies, while pay at the top of an employee's career shows no such relationship, and agencies running more retention programs show no corresponding reduction in vacancies. Turnover itself differs sharply by organization type. Fire departments report markedly lower annual turnover than non-fire agencies, with private companies reporting the highest turnover of any group, a pattern the report associates with the generally more stable employment conditions found in fire department service models rather than agency size or location.

That organizational divide, **fire department** versus everyone else, is one of the report's central threads, and it does not run in only one direction. Where a capability depends on an agency physically controlling tactical operations or its own dispatch center, fire departments hold a clear and substantial edge: they are three to four times as likely as non-fire agencies to provide ballistic protection and maintain dedicated entry teams for active-shooter response, and roughly twice as likely to have a dispatch center that walks 911 callers through CPR or screens for stroke symptoms before a unit arrives, almost certainly reflecting which agencies actually operate or directly control their own dispatch centers.

But a second, distinct pattern threads through several chapters of this report in the opposite direction, and it shows up too often to be coincidence. **Non-fire agencies, private companies, hospital-based services, and other governmental providers**, are significantly more likely than fire departments to collect structured customer satisfaction feedback, to participate in the statewide HIE, to tie staff performance metrics to actual incentives, to provide medication-assisted treatment for substance use disorder, and to administer tranexamic acid (TXA), a medication used to control bleeding in trauma patients. None of these differences is explained by agency size or location. The survey cannot say with certainty why this reversal exists, but a plausible explanation is that these practices, customer-facing accountability, data interoperability, performance-linked incentives, and fast-moving clinical protocol updates, tend to advance faster in competitive, contractually accountable organizations than in fire department governance structures built around different priorities. The larger point for readers of this report is that **fire-based and non-fire agencies are not simply better or worse versions of each other; each model appears to build a different kind of organizational strength**.

Support for the **mental and physical wellness** of EMS personnel is broadly available but unevenly resourced. Most agencies offer an employee assistance program and access to peer support, but formal, dedicated responsibility for mental health, such as a full-time position, is rare and scales heavily with agency size and, again, with fire department status. A policy allowing staff to seek help is nearly universal, but the training that supports it is thinner and does not improve much as agencies get larger. The most striking single finding in this part of the report, however, is geographic rather than organizational: **only about one in five rural agencies believe there are enough local mental health providers trained to work with first responders, compared with roughly three in five non-rural agencies, and this gap does not shrink once agency size and type are taken into account**. This points to a genuine access problem in the surrounding community rather than something a rural agency could fix on its own by growing larger or better resourced.

Community-facing services, including mobile integrated healthcare (MIH) and substance use programs, show one of the report's most distinctive geographic findings. About one in five agencies operate a MIH or community paramedicine (CP) program, teams that follow up with frequent 9-1-1 callers, chronically ill patients, and people with substance use disorders, and statewide, larger agencies are far more likely to run one. The Panhandle breaks that pattern entirely: despite having the smallest agencies, on average, of any region in the state, it has the highest rate of these programs of anywhere in Florida, and this advantage survives even after accounting for agency size. The explanation appears to be the region's disproportionate opioid burden: Panhandle programs draw heavily on opioid settlement funds, far more than programs elsewhere in the state, typically alongside their core agency budget rather than in place of it. A related finding tells the same story from a different angle: naloxone leave-behind programs, which leave the opioid overdose reversal medication with at-risk patients and their families, are three to five times more common in the Panhandle and Central Florida than in the Southeast or Northeast. Both findings indicate that, in this specific case, EMS programming has tracked actual community need closely. One caution worth flagging for planning purposes is that opioid settlement funds are not permanent and are projected to be exhausted sometime around 2039 or 2040, so programs built substantially on that funding source may eventually need a different financial footing.

Data infrastructure follows the same two patterns already established above. Nearly every agency has a written quality improvement (QI) program, but participation in the statewide HIE, which lets agencies share patient data more broadly than with a single receiving hospital, is far lower and climbs steeply with agency size; consistent with the reversed

pattern, non-fire agencies are again more likely than fire agencies to participate, once size is held constant, and more likely to tie staff incentives to performance.

The **dispatch** side of the system echoes two patterns already established in this report. Most dispatch centers can talk a caller through CPR while help is on the way, but fire-affiliated dispatch centers do this, and screen for stroke symptoms, at roughly twice the rate of non-fire dispatch centers, likely reflecting which agencies have a greater influence their dispatch operations. Rural agencies report a second, independent gap on stroke screening specifically, even after accounting for agency size and type, echoing the same access pattern seen in mental health care above. The dispatcher workforce itself shows a concerning shape: roughly half have less than five years of experience, a quarter have fifteen years or more, and comparatively few fall in between, consistent with substantial early-career loss, most often attributed to career change and low pay.

Disaster and mass-casualty readiness is strong where the response has become a standardized expectation and weaker where it depends on inter-agency coordination. Nearly every agency has hemorrhage control protocols and kits, and training to care for highly infectious disease patients is close to universal, likely reflecting the lasting effect of pandemic-era investment. Tactical readiness for active-shooter events again shows the fire department advantage described earlier. The weakest area is coordination itself: only about half of agencies participate in a regional health care coalition or use the FirstNet public safety communications network, both climbing steeply with agency size and leaving the state's smallest agencies the most isolated from these structures.

Pediatric emergency care in Florida as a whole is strong on equipment, with well standardized tools for dosing, trauma triage, and transport, yet somewhat weak on organizational infrastructure. What is missing in most agencies is a designated Pediatric Emergency Care Coordinator (PECC), a named person responsible for pediatric readiness, present at fewer than one in three agencies and tied almost entirely to agency size. Two in five agencies report they are simply unsure what the role involves, an awareness gap more than a capacity one. Florida's rate, while below the roughly 38 percent reported nationally, reflects a broader national pattern rather than a uniquely Florida-specific shortfall. The report's sharpest finding on children's health, however, concerns infant mortality reduction programs specifically, and it stands in direct contrast to the opioid story above. Only about one in five agencies participate in such a program, and unlike the opioid-related programs above, participation shows no meaningful relationship to how high infant mortality is in an agency's home county. The Panhandle, the same region with the state's highest opioid burden and highest rate of opioid-focused programming, also carries the state's highest

county-level infant mortality rate, yet it is not disproportionately served by infant mortality programs once agency size is taken into account. In other words, two community health concerns that might appear similar on paper produced two very different patterns of EMS response: one tracked the underlying need closely, and the other did not.

Trauma care findings round out the report and are notable mainly for their consistency. Nearly all agencies monitor oxygen levels and exhaled carbon dioxide during airway management, and most have adopted TXA and pelvic binders for bleeding control, while prehospital blood transfusion remains a minority practice statewide, used by about one in eight agencies. With one exception, none of these measures varies meaningfully by agency size, location, or organization type, the most structurally uniform set of findings anywhere in this report, suggesting that adoption in this clinical domain is driven primarily by individual medical director decisions rather than organizational capacity. The exception is TXA, where non-fire agencies are again significantly more likely to have adopted it, the same reversed pattern that appears repeatedly throughout this report.

Taken together, these findings describe a Florida EMS system where agency size is the most reliable predictor of what has been built, where fire department status confers real advantages in some areas and an unexpected disadvantage in others, where most apparent rural disadvantages disappear once size is accounted for except in a few areas tied to resources outside the agency's control, and where regional patterns in community health programming require direct comparison against local need before being read as evidence of need-based design. The opioid and infant mortality findings, drawn from the same survey and describing superficially similar programs, illustrate that last point most clearly: one shows Florida's EMS system responding to documented local burden, and the other does not. This report is intended to give the Department of Health, BEMO's regional staff, and Florida's EMS agencies a shared, current evidence base for the planning decisions that follow

Introduction

The 2026 Annual Florida EMS Agency Survey (Survey) was conducted between February 26, 2026, and May 5, 2026, to gather comprehensive data from EMS providers across the state. The insights collected through this effort are intended to support statewide EMS program development, inform the Florida Department of Health's (DOH) strategic resource planning, and contribute to the foundation of the DOH EMS State Plan.

This report presents an analysis of the Survey responses, highlighting key findings across the full range of survey domains: agency operations and medical direction, workforce development, time-sensitive medical care, mental health and wellness, access to care and community health integration, public information and education, data systems and QI, telecommunications, disaster preparedness, pediatric care, and trauma. Where the instrument permits direct comparison, findings are contextualized against the 2025 survey cycle. The results aim to inform ongoing efforts to strengthen Florida's EMS infrastructure and enhance service delivery statewide.

Methodology

Survey Development

The Survey was developed through a structured process coordinated by the Florida DOH (FDOH) BEMO. Beginning on October 29, 2025, Claire Guadiana, FCCM (EMS Strategic Planning and Grants Program Manager, BEMO) coordinated with the chairs of each standing Florida EMS Advisory Council (EMSAC) committee to review and streamline the 2025 instrument. Using the 2025 survey response rate data as a reference, committee chairs met with Ms. Guadiana between November 13, 2025, and January 15, 2026, to produce a revised question set for each of their respective modules. Questions with consistently low response rates, follow-on informational inquiries, and redundant sub-items were removed; new questions aligned with emerging DOH Strategic priorities were added. The resulting instrument contained 128 questions across eleven thematic modules (Q4–Q147), with 249 total items when counting all sub-parts of multi-select questions.

Farina Klocksieben, MPH (Senior Biostatistician, Research Methodology and Biostatistics Core, University of South Florida) conducted psychometric review of the revised question set, assessing clarity, relevance, and construct validity. Ms. Klocksieben designed and implemented the survey in Qualtrics.

Survey Design: Modular Architecture

The 2026 Survey introduced a modular Qualtrics design, proposed by Ms. Klocksieben on November 4, 2025, and subsequently accepted by BEMO. Rather than presenting a single monolithic form, the Survey was organized into eleven discrete modules aligned with EMSAC committees. Each agency received a personalized email sent to its primary contact (typically the organizational lead or designee), containing unique links to each of the eleven modules. The primary contact could complete all modules or forward individual module links to designated subject-matter experts within the agency. Responses submitted through any link were automatically linked to the agency's master survey record.

Completion status across modules and agencies was monitored in real time via a SharePoint-based tracking dashboard, which enabled Ms. Guadiana to conduct targeted phone follow-up with agencies that had not yet completed one or more modules.

This design has a direct analytic implication. The effective respondent count varies by module, as agencies may complete some modules but not others. Throughout this report, all

results are presented with the module-specific effective n clearly stated. Module-level nonresponse is not equivalent to agency-level nonresponse; an agency that completed ten of eleven modules contributed valid data to those ten sections.

Survey Distribution and Completion

Prior to release, the Survey was pilot tested with Regional EMS Coordinators in the BEMO office. It was released on February 26, 2026, and remained open through May 5, 2026. Although the initial close date was April 30, the survey was held open for five additional days at the request of one of the state's largest-volume agencies to allow it to finish its modules.

The distribution list was built from the contact emails of 2025 Survey respondents, supplemented during the field response period by direct outreach from Regional EMS Coordinators to agencies not on that list. The response-rate denominator is defined on the licensed in-state ground EMS provider universe (ALS or BLS service, transport or non-transport; air-only and out-of-state licensees excluded) as it stood on the February 26, 2026 release date. Because the roster available at the start of the field period proved incomplete, this universe was established from the DOH MQA weekly Providers Report and restricted by license issue date to agencies licensed on or before release, yielding 308 agencies. Of these, 214 submitted analyzable responses that link to a licensed agency, a ground coverage response rate of 69.5 percent. A small number of agencies licensed during or after the field period, together with four responses that could not be linked to a roster license, are retained in the analytic dataset but fall outside this release-anchored denominator.

In total, **233 responses were received**. Three submissions recorded at the *survey-open* timestamp were identified as platform test entries, all identical out-of-state fixed-wing interfacility transport records with null volume and workforce data, all recorded at the survey launch timestamp. Their exclusion yields an **analytic sample of 230 responses**, comprising 225 Florida agencies and five out-of-state agencies.

Two reference frames appear in this report, and they are not interchangeable. The primary frame is the February 26, 2026 release-date universe of **308 licensed Florida in-state ground agencies**., against which the response rate is reported and on which the non-response comparisons for call volume, rural designation, BEMO region, and service level are conducted; air-only services are held separate from this frame because they operate on a different model and are not comparable to ground agencies on the operational measures the survey emphasizes. The service-mode comparison (ground versus air) necessarily uses the full release-date roster of 345 licensed Florida agencies, since it tests the difference between

ground and air services. The analytic sample of 230 responses is not a strict subset of either frame. It excludes three test records, includes five out-of-state agencies, and includes agencies licensed after the release date, all retained because they submitted valid operational data.

Cross-Referencing with External Data Sources

To enhance the validity and contextual richness of the survey data, agency responses were cross-referenced with verified external datasets. Each EMS agency was identified by its Florida DOH Division of Medical Quality Assurance (MQA) license number, allowing linkage to licensure and demographic data. Call volume data were drawn from the Florida Prehospital EMS Tracking and Reporting System (EMSTARS), accessed via the biospatial analytics platform, and used to derive a five-cohort volume classification based on Jenks natural breaks applied to $\log_{10}$-transformed 2025 EMSTARS annual call volume. Breakpoints occurred at 175, 2,117, 8,255, and 34,145 calls (goodness-of-variance fit = 0.92). County-level regional assignments were drawn from the Florida Counties reference file maintained by FL-CEMS, linking each agency to its BEMO region and FDOH rural designation.

Non-Response Bias Assessment

Survey estimates generalize to the broader population of Florida EMS agencies only to the extent that responding agencies resemble those that did not respond. To assess this, respondents and non-respondents within the 308 in-state ground release-date universe were compared.

A non-response bias check compared 2025 EMSTARS annual call volume between respondents and non-respondents across the 308 in-state ground release-date universe. Volume was available for 269 of the 308 agencies; the remaining 39 did not report to EMSTARS in 2025. Distributions did not differ (respondent median 5,778 calls versus non-respondent median 6,839; Mann-Whitney U = 7,449, p = 0.60, rank-biserial r = 0.04), indicating that survey response was not associated with agency call volume. Respondents accounted for 77.9 percent of the matched universe volume.

The volume comparison was extended to three further dimensions on which respondents and non-respondents could be compared across the 308 in-state ground release-date universe: FDOH rural designation, BEMO region, and service level. Response was not associated with rural designation, with rural and non-rural agencies responding at similar rates (66.7 versus 70.2 percent; chi-square p = 0.70, Cramér's V = 0.02). Taken with the volume result, this

indicates that the survey was responded to by small and large agencies, and rural and non-rural agencies, without systematic skew.

Of the remaining dimensions, only service mode showed a clear association with response. **Air agencies responded at a substantially lower rate than ground agencies** (31.8 versus 69.5 percent; chi-square $p < 0.001$, Cramér's $V = 0.20$), consistent with the operational differences that lead this report to treat air services separately throughout. Neither BEMO region nor service level reached significance on the release-date universe. Response rates by region ranged from 58.8 percent in the Southeast to 80.3 percent in the Panhandle but did not differ significantly (chi-square $p = 0.057$, Cramér's $V = 0.17$), and the eight BLS-transport agencies responded at 37.5 percent versus 70.3 percent among ALS agencies, a difference that did not reach significance given how few BLS-transport agencies exist (Fisher's exact $p = 0.060$). Because BLS-transport agencies are so few, estimates specific to BLS-only transport operations should still be read with caution.

The overall pattern supports generalizability of the survey findings to the Florida ground EMS system, which constitutes the vast majority of agencies and call volume. On the release-date universe, **response was not associated with call volume, rural designation, BEMO region, or service level**. The only dimension showing a clear association was service mode, with air agencies responding at a markedly lower rate than ground agencies (Cramér's $V = 0.20$). Because this report treats air services separately throughout, the practical implication is limited. The main remaining caution concerns BLS-only transport operations, owing to the very small number of such agencies rather than to a statistically detectable response difference.

Statistics

Continuous variables were assessed for normality using Shapiro–Wilk, D'Agostino–Pearson, and Anderson–Darling tests as appropriate. Variables meeting normality assumptions are summarized as means with standard deviations (SDs) and compared using Student's t-test or one-way ANOVA; non-normal variables are reported as medians with interquartile ranges (IQRs) and compared using Mann–Whitney U or Kruskal–Wallis tests. Monotonic associations between non-normal measures were assessed with Spearman's rank correlation coefficient (ρ). Categorical variables are presented as counts and percentages, with 95% Wilson confidence intervals for key proportions. Subgroup differences were assessed by chi-square test, with Fisher's exact test substituted when expected cell counts were small; standardized Pearson residuals were computed to identify cells driving significance, and Cramér's V was reported as an overall effect size. Where warranted, multivariable models were fit to assess

independent predictors of key outcomes while holding the other three predictors constant: logistic regression for binary outcomes, with results reported as adjusted odds ratios (aORs) and 95% confidence intervals, and ordinary least squares (OLS) regression for continuous, ordinal, and count outcomes, with results reported as adjusted R^2 and predictor-level p-values. All tests were two-tailed with statistical significance set at $P < 0.05$. Given the descriptive and exploratory nature of the subgroup analyses conducted throughout this report, no correction for multiple comparisons was applied; findings should be interpreted accordingly. All data processing and analysis were conducted in Python 3.x using pandas, NumPy, SciPy, statsmodels, matplotlib, and seaborn.

Year-over-year comparisons are restricted to questions carried forward from 2025 without substantive modification, matched one-to-one through the question concordance. For each concordant question, the response rate is the proportion of analytic respondents providing a non-null answer, computed identically on both cleaned datasets (2025 n = 259; 2026 n = 230). Because the unit of analysis for this comparison is the question rather than the respondent, paired differences in response rates across concordant questions were tested with the Wilcoxon signed-rank test.

Report Organization

Results are organized into twelve chapters aligned with the eleven EMSAC committee modules plus an opening chapter on respondent characteristics. The chapter order follows the module sequence as deployed in the 2026 Qualtrics instrument, with one deliberate exception: the workforce items administered within the General and Medical Direction module (Q9, Q10, Q11, and Q15) are reported in the Agency Workforce chapter together with the Agency Workforce module questions (Q16 through Q20), so that all workforce content appears in one place. Each chapter introduction identifies the BEMO-requested domains addressed by its questions and states the effective respondent count for the chapter. **Table 1** maps each chapter to the survey questions it covers. Where the 2026 instrument includes questions carried forward from 2025 with no substantive modification, year-over-year comparisons are provided. New 2026 questions are identified as such.

Table 1 *Chapter scope and question crosswalk*

Ch.	Chapter title	BEMO domain	Survey questions	Items
1	Survey Responses	General demographics of EMS providers	Q1 (PII-excluded); survey response and administration metadata	1

Ch.	Chapter title	BEMO domain	Survey questions	Items
2	General Agency Operations and Medical Direction	General demographics of EMS providers; Medical direction	Q2, Q3, Q5, Q6, Q7, Q8, Q12, Q13, Q14 (Q4 PII-excluded)	9
3	Agency Workforce	EMS workforce development	Q9, Q10, Q11, Q15, Q16, Q17, Q18, Q19, Q20	9
4	Medical Care	Time-sensitive diagnoses event efforts	Q21–Q33	13
5	Health, Safety, and Wellness	EMT and paramedic mental health and wellness	Q34–Q41	8
6	Access to Care	MIH; Substance use programs; Public health efforts and integration with County Health Departments	Q42–Q57	16
7	Public Information, Education, and Relations	Public health efforts and integration with County Health Departments	Q58–Q71	14
8	EMS Data and Quality Improvement	Local data collection, quality improvement, and research	Q72–Q87	16
9	Telecommunications	Telecommunications	Q88–Q96 (Q91, Q92 not fielded)	7
10	Disaster Preparedness	Disaster and mass casualty preparedness and response	Q97–Q116	20
11	EMS for Children	Pediatric events	Q117–Q131	15
12	Trauma	Time-sensitive diagnoses event efforts (trauma)	Q132–Q147	16

Notes:

Workforce reassignment. *The fielded General and Medical Direction module spans Q4 through Q15. Four workforce items from that module, Q9 (shortage), Q10 (EMT positions and vacancies), Q11 (paramedic positions and vacancies), and Q15 (EMT, paramedic, and medical director FTE), are reported in Chapter 3 with the dedicated Agency Workforce module (Q16 through Q20) to consolidate workforce content. Chapter 2 therefore retains the general operations and medical direction items only and does not repeat Q9 through Q11 or Q15.*

Respondent classification. *Q2 (level of licensed service) and Q3 (service mode) are presented in the Chapter 2 agency profile, consistent with the Chapter 1 introduction, which states that the respondent profile by agency type, service level, and region appears in Chapter 2. They also serve as classifying variables throughout the report. Chapter 1 reports survey response and administration, not the agency profile.*

PII exclusions*. Q1 (agency identification) and Q4 (contact information) are excluded from the analytic dataset and are not reported. Q1 is retained outside the analytic file for response-rate matching only.*

Not fielded. *Q91 and Q92 returned no data across all dataset builds owing to an instrument display-logic defect and are excluded from Chapter 9 reporting.*

Results

Chapter 1 | Survey Responses

This chapter describes the response to the Survey and how the instrument performed across the field period. It reports the response total and exclusions, the timing and distribution of submissions, module-level completion, and completion time, and it sets the 2026 administration against 2025 where the two are comparable. The respondent profile by agency type, service level, and region is presented in Chapter 2. The analytic sample is 230 agencies.

Results

There were 233 total responses to the Survey. Three submissions recorded at the survey-open timestamp (February 26, 2026, 14:51) were identified as platform test entries, each an identical out-of-state air fixed-wing interfacility transport record with null volume and workforce data, and all three were excluded (analytic n = 230).

Responses arrived across the full response period (**Figure 1**).

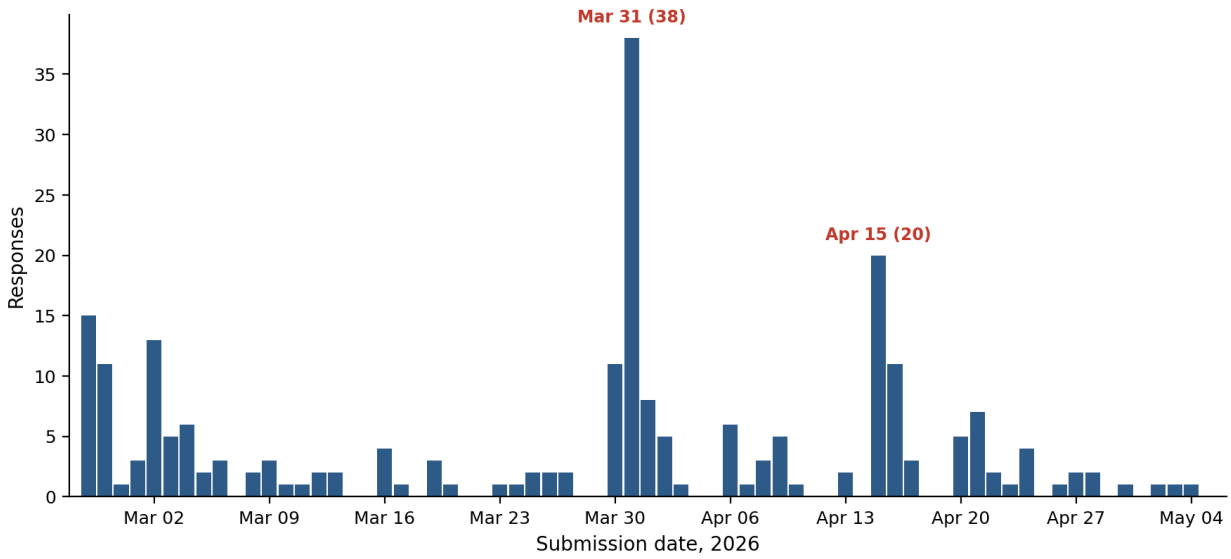

Figure 1 *Daily response counts, February 26 to May 5, 2026.*

The opening week drew 23 percent of the sample and the final week only 3 percent. Two sharp interior peaks appear, 38 responses on March 31 and 20 on April 15. These likely

correspond to personal communication from BEMO staff to the non-responding agencies. Submission timing did not vary across agency type or characteristic.

The median time from survey launch to submission was 32.8 days (IQR 7.8 to 47.9), with no difference by BEMO region, agency type, service level, service mode, or call-volume cohort (all $p > 0.11$).

Effective response count varied by module (**Table 2**), from full participation in the opening modules to 67.8 percent for Medical Care and 76.5 percent for Communications.

Table 2 *Module completion by agency, 2026 (analytic n = 230)*

Module	Entry question	Agencies completing	Completion rate
1 Respondent Characteristics	Q2	230	100.0%
2 General & Medical Direction	Q5	230	100.0%
3 Agency Workforce *	Q16	185	80.4%
4 Medical Care *	Q22	156	67.8%
5 Health, Safety & Wellness *	Q35	181	78.7%
6 Access to Care	Q42	215	93.5%
7 PIER	Q58	215	93.5%
8 EMS Data & QI	Q74	227	98.7%
9 Communications	Q89	176	76.5%
10 Disaster Preparedness	Q98	223	97.0%
11 EMS for Children	Q117	185	80.4%
12 Trauma	Q132	228	99.1%

Note: *Completion is defined as a non-null response to each module's first non-branching entry question.*

** Modules 3 (Q16), 4 (Q22), and 5 (Q35) carry a multi-select or gated entry question whose rate sits below the item that follows it; the figure for these three is a lower bound on module entry rather than a clean entry rate.*

Table 3 *Average per-question response rate by module, 2025 vs. 2026*

Module	2025	2026	Change (pp)
3 Agency Workforce	56.9%	83.2%	26.3%
4 Medical Care	65.3%	62.8%	-2.5%
5 Health, Safety & Wellness	48.6%	95.1%	46.5%
6 Access to Care	33.0%	46.1%	13.1%
7 PIER	63.7%	66.5%	2.8%
8 EMS Data & QI	83.0%	74.3%	-8.7%
9 Communications	47.8%	66.1%	18.3%
10 Disaster Preparedness	66.5%	67.0%	0.5%
11 EMS for Children	50.1%	72.1%	22.0%
12 Trauma	61.4%	70.2%	8.8%

Module	2025	2026	Change (pp)

***Note**: Rates are the means of per-question response rates within each module. 2025 rates use the cleaned analytic base (n = 259); 2026 uses n = 230. The upward shift primarily reflects removal of low-response questions in the 2026 revision (a composition effect). The like-for-like comparison of retained questions (**Table 4**) shows a smaller, genuine improvement in response as well. Change (pp) is the difference between the 2025 and 2026 rates in percentage points (2026 minus 2025).*

At the module level the average per-question response rate rose in eight of ten comparable modules in 2026 compared with 2025 (**Table 3**).

When restricted to the 65 questions carried forward unchanged and matched one to one (**Table 4**), the mean per-question response rate rose from 84.9 percent in 2025 to 88.3 percent in 2026 (median 90.0 to 94.8 percent), higher in 2026 for 53 of 65 questions, a small but statistically significant improvement (Wilcoxon $p < 0.001$).

Table 4 *Year-over-year response on carried-forward questions, by EMSAC committee group.*

EMSAC Committee group	Questions	Mean 2025	Mean 2026	Change (pp)	Higher in 2026
2 General & Medical Direction	9	0.961	0.917	-4.4	5 of 9
3 Agency Workforce	1	0.849	0.948	9.8	1 of 1
4 Medical Care	6	0.732	0.753	2.1	5 of 6
5 Health, Safety & Wellness	6	0.826	0.946	11.9	3 of 6
6 Access to Care (MIH/CP)	6	0.672	0.730	5.8	6 of 6
7 PIER	5	0.931	0.945	1.4	3 of 5
8 EMS Data & QI	7	0.969	0.945	-2.4	6 of 7
9 Communications	2	0.705	0.765	6.1	2 of 2
10 Disaster Preparedness	9	0.802	0.839	3.7	9 of 9
11 EMS for Children	6	0.766	0.891	12.5	5 of 6
12 Trauma	8	0.952	0.982	3	8 of 8
All carried-forward content	**65**	**0.849**	**0.883**	**3.4**	**53 of 65**

Note: *Questions carried forward unchanged from 2025 with a one-to-one match in the question concordance, excluding six contact-information questions whose 2026 fields are PII-stripped (per-question detail in Appendix B). Per-question rate is the share of analytic respondents giving any non-null answer (2025 n = 259; 2026 n = 230). Wilcoxon signed-rank across all 65 pairs: p < 0.001 (2026 higher). Change (pp) is 2026 minus 2025.".*

The improvement was not uniform. Most committee's question groups rose, with the largest gains in *EMS for Children* and *Mental Health, Safety & Wellness* (each about 12 points), while *General & Medical Direction* and *EMS Data & QI* edged down from rates already near ceiling (Appendix B).

Among agencies that finished the Survey in a single sitting, **median completion time was 34 minutes** in 2026 against 41 minutes for the 2025 instrument (**Table 5**).

Table 5 *Survey completion time, 2025 vs. 2026*

Survey administration	Median (min)	IQR (min)	n
2025 monolithic, overall	50	33-103	259
2025 monolithic, single sitting (< 2 h)	41	29-63	203
2026 modular, single sitting (< 2 h)	34	23-51	116

Note*: 2025 was a single instrument, so its duration is a clean completion time. Under the 2026 modular design, a single sitting may cover only the modules an agency completed at that time, so the lower 2026 figure indicates a lighter per-sitting burden rather than a strict like-for-like reduction. Among agencies that finished the survey in a single sitting, median completion time was 34 minutes in 2026 against 41 minutes for the 2025 instrument (Mann-Whitney U = 9,456, p = 0.002, rank-biserial r = 0.21;* ***Table 5****).*

Discussion

Response tracked the initial distribution and the targeted telephone follow-up conducted through the SharePoint completion dashboard rather than the approaching close date, and the follow-up reached every subgroup at comparable timing. The two year-over-year comparisons read together indicate that the 2026 revision made the instrument leaner while modestly improving the responses it elicited. The module-level rise reflects removal of chronically low-response questions, while response on retained content rose slightly but significantly. The lower single-sitting completion time is consistent with a lighter per-sitting burden under the modular design since an agency could complete the instrument in shorter passes across several sittings.

Limitations

For three modules the entry question is multi-select or gated (Modules 3, 4, and 5), so a respondent who opens the module without responding to a question is registered as missing, and the reported completion figure is thus a lower bound on module entry. The year-over-year comparison is restricted to the 65 carried-forward questions that could be matched one to one with rates available in both years. The same “any-non-null response” rule applies to both years. Completion time is not a strict like-for-like, because a 2026 single sitting session may cover only part of the modular instrument. Generalizability caveats by region, service level, and service mode are addressed in the Non-Response Bias Assessment subsection of the Methodology section and are not repeated here.

Chapter 2 | General Agency Operations and Medical Direction

BEMO Domain: General demographics of EMS providers; Medical direction

The General Agency Operations and Medical Direction chapter establishes the operational profile of the responding agencies and the structure of their medical direction. It describes the mix of licensed service levels, service modes, organization types, and tax status across respondents, then introduces a call-volume cohort framework used throughout the report to stratify agencies by operational scale. The chapter characterizes the daily staffing of frontline ground vehicles, including the degree of flex capacity between minimum and maximum deployment, and examines physician medical direction, including the medical director's employment type and the budget committed to that function. Both staffing flexibility and medical direction expenditure are examined by volume cohort, with agency size emerging as the primary driver of variation in each.

Results

The 230 responding agencies are predominantly fire-based. Fire departments account for 67.0 percent of respondents (154 agencies), followed by private non-hospital providers at 19.1 percent (44), hospital-based services at 8.3 percent (19), and governmental non-fire agencies at 5.7 percent (13) (**Table 6**).

Table 6 *Agency characteristics of responding agencies.*

Characteristic	Agencies (n)	Percent
Organization type (Q5)		
Fire department	154	67.0%
Private non-hospital	44	19.1%
Hospital	19	8.3%
Governmental non-fire	13	5.7%
Level of licensed service (Q2)		
ALS and BLS	128	55.7%
ALS only	99	43.0%
BLS only	3	1.3%
Service mode (Q3)		

Characteristic	Agencies (n)	Percent
Ground	216	93.9%
Air	14	6.1%
Tax status (Q6)		
Government or other public	149	64.8%
For-profit	46	20.0%
Not-for-profit	35	15.2%
BEMO region		
Southeast	58	25.2%
Northeast	54	23.5%
Central	40	17.4%
Southwest	39	17.0%
Panhandle	34	14.8%
Out of State	5	2.2%
FDOH rural designation (Florida agencies, n = 225)		
Rural	42	18.7%
Non-rural	183	81.3%
2025 call volume cohort		
Cohort assigned	200	87.0%
Unclassified (air or EMSTARS non-reporter)	30	13.0%

Source: *2026 FL EMS Agency Survey; analytic n = 230 unless noted. Percentages are of responding agencies.*

Most agencies operate at the advanced life support level: 98.7 percent are ALS-capable, comprising 55.7 percent licensed for both ALS and BLS (128) and 43.0 percent for ALS only (99), with only three agencies (1.3 percent) licensed for BLS alone. Service delivery is overwhelmingly ground-based, with 216 agencies (93.9 percent) providing ground service and 14 (6.1 percent) operating air services. By tax status, 64.8 percent report a government or other public designation (149), 20.0 percent are for-profit (46), and 15.2 percent are not-for-profit (35). Respondents are distributed across all five BEMO regions, from 34 agencies in the Panhandle to 58 in the Southeast, together with five out-of-state agencies. Forty-two respondents serve FDOH-designated rural counties, 18.7 percent of the 225 Florida agencies. Call volume cohorts were assigned to 200 agencies; the 30 without an assigned cohort are air services or agencies that did not report to EMSTARS in 2025.

Annual call volume among the 200 cohort-assigned agencies spans nearly six orders of magnitude, from a single call to more than 327,000 (**Figure 2**).

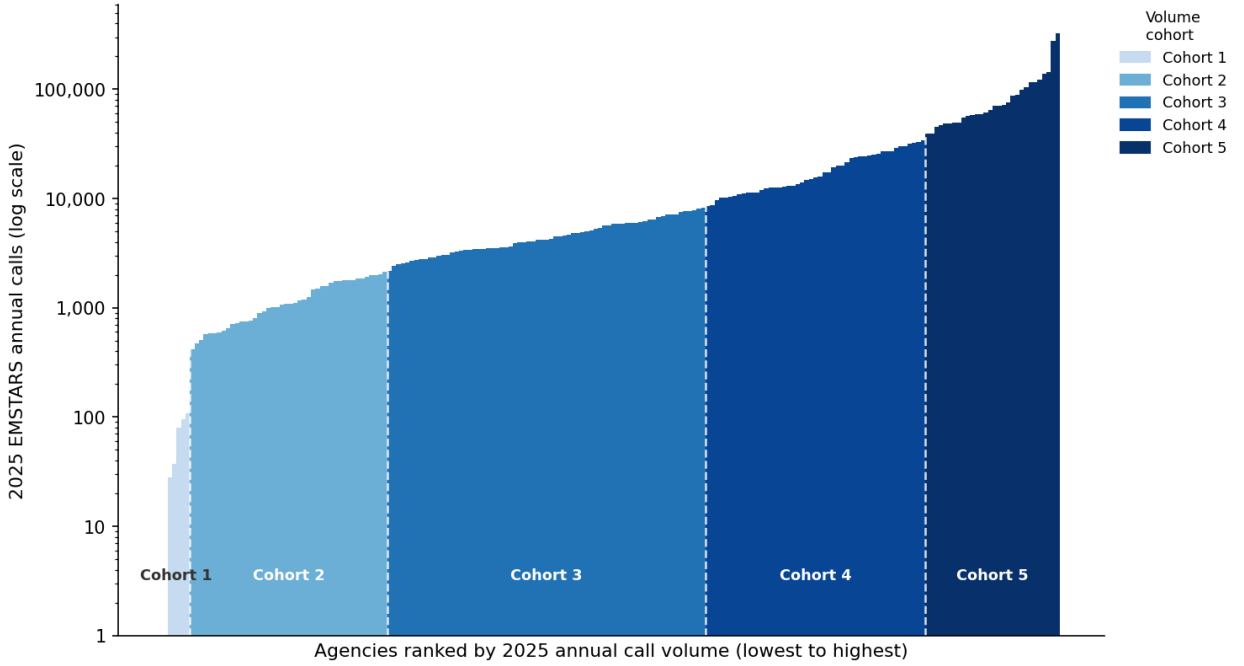

Figure 2 *Pareto-style distribution of 2025 EMS annual call volumes across agencies.*

Note*: Agencies are ranked from lowest to highest call volume (log scale), with segmentation into five cohorts based on volume thresholds. Color gradients denote cohort membership, and dashed vertical lines mark cohort boundaries, highlighting the increasing concentration of call volume among higher-volume agencies.*

The distribution is heavily right-skewed: most agencies cluster at the lower end of the scale, while a small number of large urban systems account for a disproportionate share of total statewide volume. Dividing agencies into equal-width bands would place nearly all of them in the lowest band and leave the upper bands dominated by a handful of outliers. Instead, cohort boundaries were set by an algorithm that finds the natural gaps in the data, points where volume jumps sharply rather than rising gradually, so that agencies within each cohort resemble one another more closely than they resemble agencies in adjacent cohorts. This yields five cohorts ranging from the smallest services (Cohort 1, ≤175 annual calls, n = 6) through the modal Florida EMS provider (Cohort 3, 2,118–8,255 calls, n = 71) to the largest systems in the state (Cohort 5, >34,145 calls, n = 30; **Figure 3**).

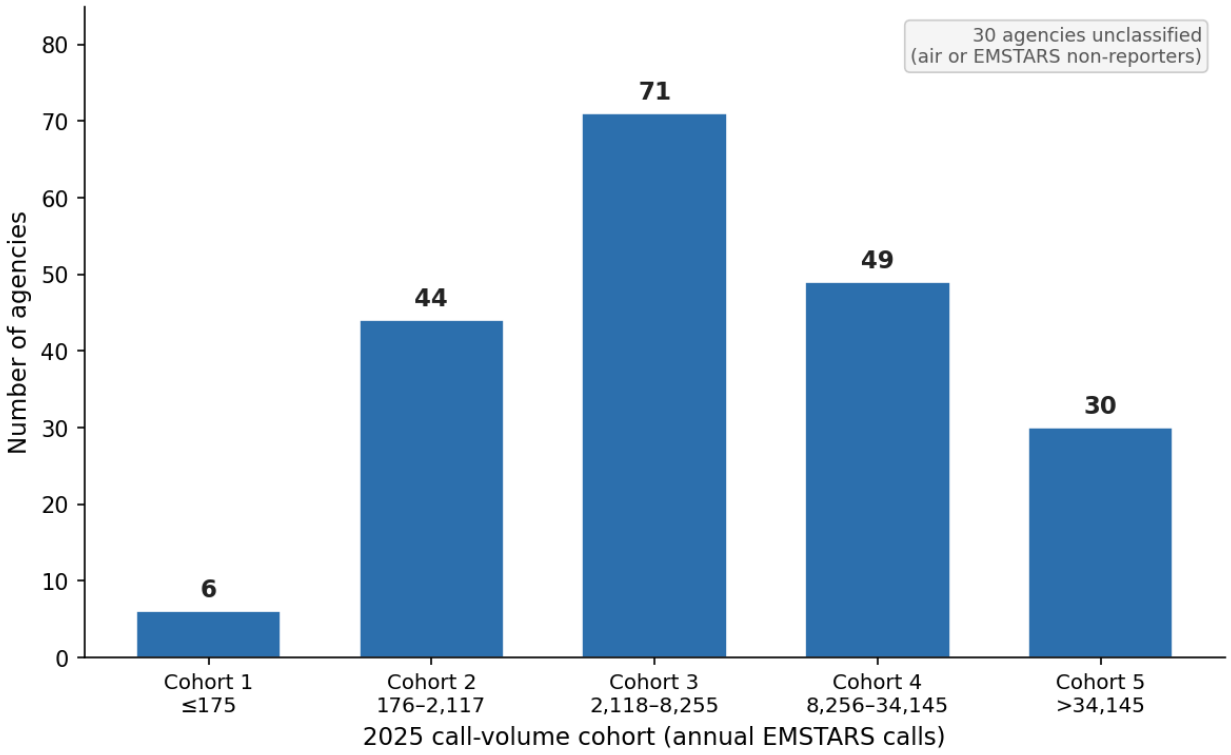

Figure 3 *Distribution of agencies by 2025 EMS call-volume cohort.*

Note*: Bars represent the number of agencies within each cohort defined by annual EMSTARS call volume thresholds (Cohort 1: ≤175; Cohort 2: 176–2,117; Cohort 3: 2,118–8,255; Cohort 4: 8,256–34,145; Cohort 5: >34,145). Value labels indicate counts per cohort. An additional 30 agencies are unclassified (air or EMSTARS non-reporters) and are not included in the cohort totals.*

Thirty agencies (i.e., air services and ground agencies without 2025 EMSTARS submissions) could not be assigned a cohort and are carried as unclassified throughout. The distribution of cohorts across the five BEMO regions is shown in **Table 7**.

A roster of agencies by cohort appears in Appendix B.

Agencies staff a modest number of frontline ground vehicles on a typical day, with a small number of large systems forming the upper tail (**Table 8**).

Table 7 *Analytic agencies by BEMO region and 2025 call-volume cohort (n = 230)*

BEMO Region	Cohort 1 (≤175)	Cohort 2 (176–2,117)	Cohort 3 (2,118–8,255)	Cohort 4 (8,256–34,145)	Cohort 5 (>34,145)	Unclassified	Total
Southeast	2	12	14	16	6	8	58
Northeast	2	7	22	9	10	4	54
Central	0	6	6	13	8	7	40
Southwest	1	10	12	7	3	6	39
Panhandle	1	7	17	4	3	2	34
Out of State	0	2	0	0	0	3	5
Total	**6**	**44**	**71**	**49**	**30**	**30**	**230**

***Note**: Unclassified agencies are air services or ground agencies without a 2025 EMSTARS volume record. Out-of-state agencies are excluded from regional comparisons. The mix of agency sizes did not differ significantly across the five Florida BEMO regions among the 198 cohort-assigned Florida agencies (chi-square = 22.84, df = 16, p = 0.12, Cramér's V = 0.17).*

Table 8 *Frontline staffed ground vehicles (Q7, Q8).*

Measure	Minimum staffed (Q7)	Maximum staffed (Q8)
Agencies responding (n)	180	180
Median	6	7
Interquartile range	3 to 15	4 to 16
Mean	15.9	17.6
Range	1 to 200	1 to 200

Source: *2026 FL EMS Agency Survey. Shown to ground-service agencies; 180 answered. Q7 is the minimum and Q8 the maximum number of permitted frontline ground vehicles staffed on an average day. Each variable is summarized on its own responding base; four agencies reported a maximum below their minimum.*

Among the 180 ground-service agencies answering, the median minimum daily unit staffing was six vehicles (interquartile range three to 15) and the median maximum was seven (interquartile range four to 16). The distribution is strongly right-skewed: 46.1 percent of agencies staff a minimum of five or fewer vehicles, and 15.0 percent staff only one or two, while 17.8 percent staff 21 or more, extending to a maximum of 200. The mean of 15.9 vehicles for the minimum and 17.6 for the maximum therefore sits well above the median. The narrow aggregate gap between the typical minimum and maximum, a median difference of one vehicle, indicates that daily staffing is stable for most agencies overall, but this summary obscures a pattern that emerges when agencies are examined by volume cohort (**Figure 4**).

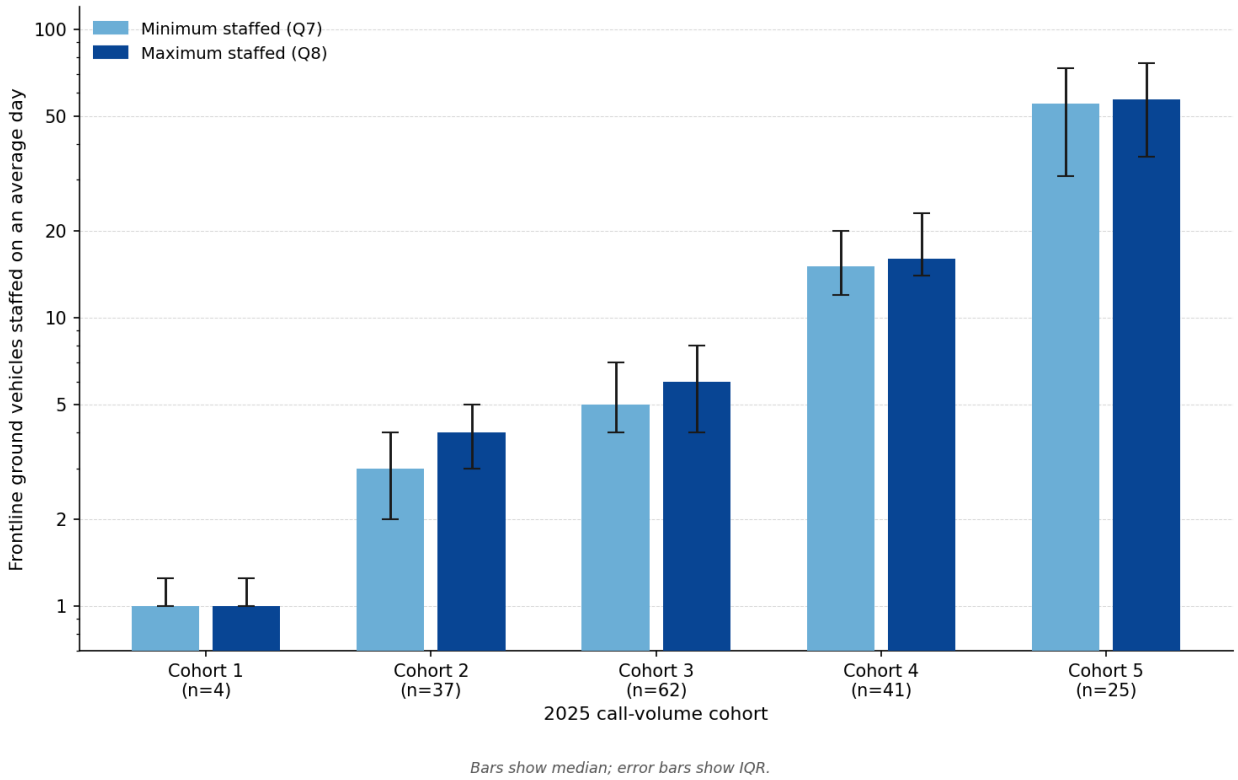

Figure 4 *Median minimum (Q7) and maximum (Q8) number of frontline ground vehicles staffed on an average day.*

Note: *Organized by 2025 call-volume cohort, among ground-service agencies responding to both items (n = 169). Bars represent medians; error bars represent interquartile ranges. Cohort 1 agencies (≤175 annual calls) reported identical minimum and maximum staffing in all four cases. A Wilcoxon signed-rank test indicated a statistically significant difference between minimum and maximum staffing in Cohorts 2 through 5 (all p ≤ 0.002). Log scale is used on the vertical axis to accommodate the range of values across cohorts.*

All four Cohort 1 agencies reported identical minimum and maximum staffing, indicating flat daily deployment with no flex capacity. The proportion of agencies staffing flexibly, reporting a higher maximum than minimum, rises with volume cohort: 38 percent in Cohort 2, 44 percent in Cohort 3, 59 percent in Cohort 4, and 68 percent in Cohort 5. Among agencies with any flex, the magnitude of that flex also grows with volume: the median difference between maximum and minimum staffing is one vehicle in Cohorts 2 and 3, two vehicles in Cohort 4, and 4.5 vehicles in Cohort 5. A Wilcoxon signed-rank test on paired minimum and maximum values confirms that the difference is statistically non-significant only in Cohort 1 ($p = 1.00$) and significant in all others (Cohort 2: $p = 0.002$; Cohorts 3–5: $p < 0.001$).

Nearly all agencies engage paid medical direction. Of 229 agencies answering, 97.8 percent compensate their medical director (224) and 2.2 percent rely on a volunteer arrangement (5) (**Table 9**).

Table 9 *Medical direction characteristics.*

Characteristic	Agencies (n)	Percent
Medical director compensation (Q12, n = 229)		
Paid	224	97.8%
Volunteer	5	2.2%
Medical director schedule (Q13, n = 229)		
Part-time (< 30 hrs./week)	134	58.5%
Full-time (≥ 30 hrs./week)	95	41.5%
Annual medical direction expenditure (Q14, paid responding n = 216)		
< $50,000	119	55.1%
$50,001 to $100,000	52	24.1%
$100,001 to $150,000	17	7.9%
> $150,000	28	13.0%

Source: *2026 FL EMS Agency Survey. Compensation and schedule denominators are agencies answering each item (n = 229). Expenditure was displayed only to agencies with a paid medical director and answered by 216 of 224.*

Part-time medical direction is the norm, with 58.5 percent of medical directors working part-time, defined as fewer than 30 hours per week (134), against 41.5 percent full-time (95). Among the 216 agencies with a paid medical director that reported expenditure, annual spending on medical direction is concentrated at the lower end: 55.1 percent spend less than $50,000 (119), and 79.2 percent spend less than $100,000 cumulatively. The remaining agencies fall into higher bands, with 13.0 percent spending more than $150,000 (28).

Medical direction expenditure varies strongly with agency size. Spending is almost entirely concentrated in the lowest compensation band among small agencies. All six Cohort 1 agencies and 72 percent of Cohort 2 agencies spend less than $50,000 annually, while the pattern shifts sharply at higher volumes: 67 percent of Cohort 5 agencies spend more than $150,000, and only two report spending less than $50,000. This gradient is highly significant (chi-square = 104.39, df = 12, $p < 0.001$, Cramér's V = 0.43) (**Figure 5**).

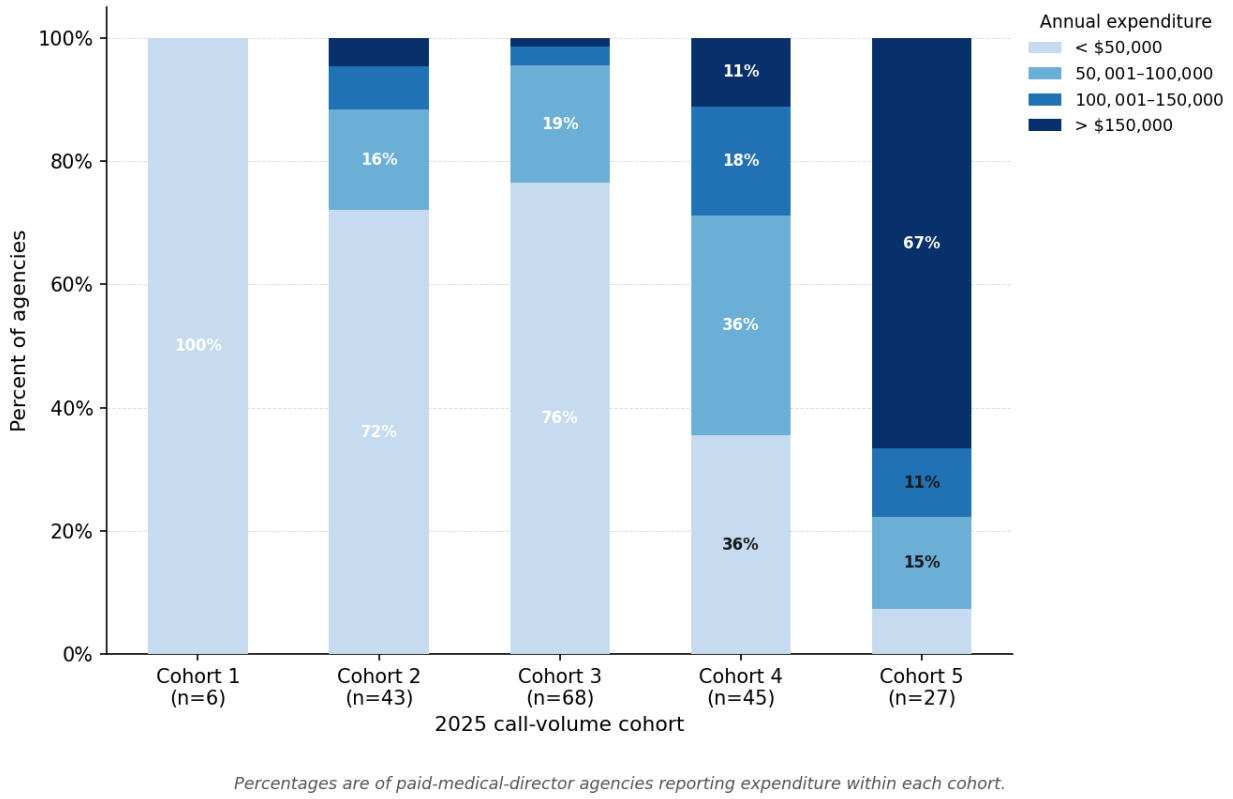

Figure 5 *Annual medical direction expenditure by 2025 call-volume cohort, among agencies with a paid medical director reporting expenditure (n = 189).*

Note: *Each bar represents the percentage distribution of agencies within a cohort across four spending bands. Cohort 1, ≤175 annual calls; Cohort 2, 176–2,117; Cohort 3, 2,118–8,255; Cohort 4, 8,256–34,145; Cohort 5, >34,145. Chi-square = 104.39, df = 12, p < 0.001, Cramér's V = 0.43.*

When agency size is accounted for, expenditure does not differ significantly by BEMO region (likelihood ratio test p = 0.42), indicating that the volume of calls an agency handles rather than its geographic location is the primary driver of medical direction spending.

Discussion

The respondent profile is consistent with the structure of the Florida EMS system, in which fire-based agencies operating at the ALS level provide the majority of prehospital care. This reflects a nationally common, but not nationally dominant, model. Fire departments are the single most common employer of EMS professionals nationally (Rivard et al., 2021). Approximately 48% of nationally certified EMS professionals work for fire departments, making it the largest single employer type, followed by private agencies at 21% (Rivard et al., 2021). Among paramedics specifically, 43–45% reported fire-based organizations as their primary employer over a 10-year longitudinal study (Bentley et al., 2016). Florida's

concentration of ALS-capable agencies at 98.7 percent indicates that clinical operations are predominantly oriented toward advanced life support services statewide.

While fire-based agencies represent a plurality of EMS providers nationally, they do not constitute a clear majority of all EMS agencies or service delivery models. The predominance of fire-based agencies providing the majority of prehospital care is more characteristic of the broader Southeast and Sun Belt regions than of the nation as a whole. At the national level, EMS delivery remains highly fragmented and heterogeneous. Federal and national assessments describe EMS as a locally designed system with substantial variation in organizational structure, staffing, financing, and service delivery, reflecting differences in community needs and governance (MacKenzie & Carlini, 2013; National Association of State EMS Officials (NASEMSO), 2020). EMS care may be delivered through a wide range of organizational models, including fire-based, hospital-based, private, third-service, public utility, and law enforcement–based agencies, often operating in combination within the same system (MacKenzie & Carlini, 2013; National Association of State EMS Officials (NASEMSO), 2020).

The near-universal use of paid medical direction in Florida (97.8%) indicates that formal physician oversight is firmly institutionalized across agency types and aligns with national expectations that medical direction is a fundamental component of EMS system design. Contemporary national guidance characterizes physician oversight as a core element of clinical governance in prehospital care, supporting quality assurance, protocol development, and system accountability (National Association of EMS Physicians (NAEMSP), 2017; U.S. Fire Administration, 2012). At the national level, system assessments further demonstrate the widespread penetration of this model, with more than 9,300 local EMS services operating under physician medical directors, indicating that structured medical oversight is broadly implemented across the United States (National Association of State EMS Officials (NASEMSO), 2020).

At the same time, the predominance of part-time arrangements and relatively modest expenditures observed in Florida is consistent with national patterns of organizational variability in EMS system design. Federal analyses emphasize that EMS systems are locally configured and exhibit substantial variation in staffing, governance, and resource allocation, including the structure and intensity of medical direction (MacKenzie & Carlini, 2013). Within this decentralized framework, physician oversight is frequently delivered through contract-based or limited-hour arrangements rather than dedicated full-time positions, particularly among smaller or lower-volume agencies. The right-tailed distribution of expenditures above

$150,000 observed in Florida corresponds with this national pattern of heterogeneity, reflecting the scaling of medical direction requirements in larger, higher-volume systems.

These findings suggest that Florida mirrors the national EMS landscape in both the ubiquity and variability of medical direction. Physician oversight is nearly universal as a structural requirement, but the level of engagement, contractual structure, and associated cost vary considerably across agencies, consistent with differences in system size, call volume, and organizational model observed nationwide.

Agency size emerges as a cross-cutting determinant of operational capacity in Florida, and this relationship is consistent with patterns observed nationally in EMS system organization. The relationship between call volume and staffing flexibility, where smaller agencies maintain fixed staffing levels and larger systems sustain a wider deployable range, is consistent with previously described national variation in EMS system configuration and resource allocation (MacKenzie & Carlini, 2013). Within this decentralized framework, smaller agencies often operate with constrained workforce pools and limited call variability, reducing both the feasibility and necessity of maintaining flex capacity, while larger systems are more able to support dynamic deployment and surge staffing models.

The monotonic increase in flex capacity across volume cohorts observed in Florida is therefore consistent with a broader pattern in which operational complexity and resource elasticity scale with system size. A similar gradient is observed in medical direction expenditure, where spending is concentrated at lower levels among smaller agencies and increases substantially among higher-volume systems. This pattern reflects the same underlying structural scaling rather than geographic influence and aligns with national findings that EMS system characteristics, including governance intensity and resource allocation, vary widely across agencies (MacKenzie & Carlini, 2013; National Association of State EMS Officials (NASEMSO), 2020).

Importantly, the attenuation of apparent regional effects once agency size is controlled for indicates that geographic variation primarily reflects the size distribution of agencies within regions rather than an independent regional effect. This compositional relationship between region and agency size is consistent with the broader national EMS landscape, in which variation across regions is often driven by differences in system structure and agency composition rather than uniform regional practices (MacKenzie & Carlini, 2013).

In summary, these findings support the use of volume-based cohorting as an analytically meaningful framework for interpreting operational and resource variation across the Florida EMS agency population and justify its continued use throughout the remainder of this report.

Limitations

Organization type and tax status are self-reported single-select classifications, so agencies with hybrid structures are represented only by their primary designation. The medical direction expenditure item was shown only to agencies with a paid medical director and was answered by 216 of 224 such agencies, so the spending distribution excludes volunteer arrangements and the small number of paid agencies that did not report a figure. Expenditure is captured in banded ranges rather than exact amounts, which precludes computation of a mean. The frontline vehicle items (Q7 and Q8) were shown only to ground-service agencies and were answered by 180; four agencies reported a maximum below their minimum, a logical inconsistency left uncorrected, and each variable is summarized on its own responding base.

As detailed in the Non-Response Bias Assessment, BLS-transport and air agencies are under-represented, so the characteristics of those segments are estimated less precisely than those of the ground ALS system.

Interpretation of cohort-based differences relies on annual call volume as a proxy for agency size, resource capacity, and organizational complexity. While call volume is strongly correlated with these characteristics, it does not directly measure workforce availability, budget structure, or management strategy. As a result, observed differences in staffing flexibility and medical direction expenditure cannot be definitively attributed to intentional operational design versus structural constraints imposed by agency size.

Chapter 3 | Agency Workforce

BEMO Domain: EMS workforce development

The Agency Workforce chapter consolidates the report's workforce content, drawing on items from both the workforce module and the general operations module. It examines the prevalence and composition of EMT and paramedic shortages, budgeted positions and current vacancies, the size of the licensed workforce by role, and the human-resource practices agencies use to recruit and retain staff, covering benchmarking, retention strategies, turnover, and base salary. Each measure is examined in relation to agency size, organization type, region, and rural designation to identify where workforce conditions vary systematically and where they reflect uniform pressure across the Florida EMS system. Paramedic availability emerges as the binding constraint across the system, while turnover patterns, salary structures, and retention investment are shown to vary substantially by organizational type and, to a lesser extent, by agency size and geography.

Results

A majority of responding agencies reported an active staffing shortage. Of 229 agencies answering the shortage item, 138 (60.3 percent) reported a current shortage of EMTs, paramedics, or both, while 91 (39.7 percent) reported no shortage (**Table 10**).

Table 10 *Workforce shortage prevalence (Q9).*

Shortage status	Agencies (n)	Percent of respondents
No shortage reported	91	39.7%
Shortage of EMTs only	4	1.7%
Shortage of paramedics only	89	38.9%
Shortage of both EMTs and paramedics	45	19.7%
Any shortage reported	138	60.3%
Any paramedic shortage	134	58.5%
Any EMT shortage	49	21.4%
Total responding	229	100.0%

Source: *2026 FL EMS Agency Survey; analytic n = 230; Q9 responding n = 229 (1 item nonresponse). Single-select question.*

The shortage was concentrated in the paramedic workforce. A paramedic shortage, alone or in combination with an EMT shortage, was reported by 134 agencies (58.5 percent), whereas

an EMT shortage was reported by 49 agencies (21.4 percent). Shortages affecting both roles were reported by 45 agencies (19.7 percent), and shortages limited to EMTs alone were rare at 4 agencies (1.7 percent).

The position and vacancy items quantify the magnitude of that constraint. Because the EMT position item was displayed only to basic life support (BLS)-capable agencies and the paramedic item only to ALS-capable agencies, each is reported against its display denominator (**Table 11**)

Table 11 *Budgeted positions and current vacancies, by role (Q10, Q11).*

Metric	EMT (Q10)	Paramedic (Q11)
Agencies shown the question (denominator)	131	227
Agencies reporting budgeted positions	127	217
Total budgeted positions reported	8,054	18,384
Median budgeted positions per agency [IQR]	19 [6, 75]	37 [12, 80]
Agencies reporting vacancies	123	214
Total current vacancies reported	1122	1799
Median vacancies per agency [IQR]	0 [0, 6]	3 [0, 9]
Aggregate vacancy rate	13.9%	9.8%
Agencies reporting ≥1 vacancy	54	146
Agencies reporting ≥1 vacancy (% of valid)	44.3%	68.5%

Source: *2026 FL EMS Agency Survey. Q10 (EMT) displayed to BLS-capable agencies; Q11 (paramedic) to ALS-capable agencies. Aggregate vacancy rate = summed vacancies / summed budgeted among agencies answering both with budgeted >0; two impossible records excluded from rate. IQR = interquartile range (25th to 75th percentile).*

Among the 127 BLS-capable agencies reporting EMT positions, agencies reported 8,054 budgeted EMT positions and 1,122 current EMT vacancies, an aggregate EMT vacancy rate of 13.9 percent. Among the 217 ALS-capable agencies reporting paramedic positions, agencies reported 18,384 budgeted paramedic positions and 1,799 current paramedic vacancies, an aggregate paramedic vacancy rate of 9.8 percent. The two measures describe different features of the shortage. The EMT vacancy rate is higher in proportional terms, but paramedic vacancies are more widespread: 68.5 percent of valid ALS-capable agencies reported at least one paramedic vacancy, compared with 44.3 percent of BLS-capable agencies reporting at least one EMT vacancy.

Unlike staffing flexibility and medical direction expenditure, **shortage prevalence does not vary significantly by agency size or geographic region**. The proportion of agencies reporting any shortage is approximately 60 percent across all five volume cohorts and all five BEMO regions, with neither predictor approaching significance in unadjusted or adjusted

analyses (cohort: chi-square = 2.03, df = 4, p = 0.73; region: chi-square = 6.17, df = 4, p = 0.19; joint likelihood ratio test p = 0.26). Rural agencies reported a somewhat higher shortage prevalence (71.4 percent) than non-rural agencies (56.8 percent), though this 14.6 percentage-point difference did not reach statistical significance given the small rural sample (n = 42; Fisher's exact p = 0.12). The workforce shortage appears to be a system-wide condition rather than one concentrated in agencies of a particular size, location, or rural designation.

Agencies reported the size of their current workforce in full-time-equivalent terms (**Table 12**).

Table 12 *Workforce full-time equivalents by role (Q15).*

Role	Agencies reporting (n)	Total FTE reported	Mean	Median	IQR	Maximum
EMT	216	12,520	58	21	6–58	800
Paramedic	217	19,150	88.2	31	11–78	1,990
Medical director	203	275	1.4	1	1–2	8

Source: *2026 FL EMS Agency Survey; analytic n = 230. Q15 shown to all agencies. Totals are sums across responding agencies only, not statewide personnel counts. IQR = 25th to 75th percentile.*

Responding agencies fielded 12,520 EMT full-time equivalent (FTE) (216 agencies), 19,150 paramedic FTE (217 agencies), and 275 medical-director FTE (203 agencies). These totals reflect responding agencies only and should not be read as statewide personnel counts. The distributions are right-skewed, with median agency staffing of 21 EMT FTE and 31 paramedic FTE against maxima of 800 and 1,990, reflecting the small number of very large county systems in the respondent pool. Reported EMT FTE exceed reported budgeted EMT positions because the FTE item was administered to all agencies, including ALS-only agencies that employ EMTs but were not shown the EMT position item.

Workforce size scales strongly with call volume across all three roles, with volume cohort the dominant predictor of EMT, paramedic, and medical director FTE in all adjusted models (all p < 0.001). Beyond scale, however, the composition of the clinical workforce, the ratio of EMT to paramedic FTE an agency deploys to meet a given call volume varies significantly by region. After controlling for cohort, the Southeast carries a notably larger paramedic workforce relative to agencies of equivalent volume elsewhere, while Southwest and Northeast agencies employ proportionally more EMT FTE than their Southeast counterparts (likelihood ratio test for regional contribution: EMT FTE p < 0.001, paramedic FTE p < 0.001). Medical director FTE does not vary significantly by region once volume is held constant (p = 0.056). Rural designation is not a significant predictor of workforce composition for any role after

cohort and region are accounted for (all $p > 0.50$), indicating that lower raw FTE counts in rural agencies reflect their smaller operational scale rather than an independent effect of rurality.

Workforce capacity is unevenly distributed across the state (**Table 13**).

Table 13 *EMT and paramedic full-time equivalents by BEMO region (Q15).*

BEMO region	Agencies reporting (n)	EMT FTE	Paramedic FTE	Total clinical FTE
Panhandle	34	1105	953	2058
Northeast	52	4530	5632	10162
Central	36	2320	3546	5866
Southwest	37	2410	1800	4210
Southeast	53	2105	7181	9286
Out of State	4	50	38	88
Statewide (responding agencies)	216	12520	19150	31670

Source: *2026 FL EMS Agency Survey. FTE summed across responding agencies within each BEMO region; reflects respondents only. "Out of State" denotes Florida-licensed agencies with an out-of-state base. The n column counts EMT-FTE reporters and varies slightly by item.*

The Northeast and Southeast regions account for the largest reported clinical workforce, at 10,162 and 9,286 combined EMT and paramedic FTE respectively. Together they account for more than half of the statewide reported total of 31,670. The Panhandle reported the smallest in-state workforce at 2,058 FTE. Role mix also varies by region: the **Southeast workforce is heavily paramedic-weighted** (7,181 paramedic against 2,105 EMT FTE), while the Panhandle and Southwest report more balanced or EMT-leaning staffing. These regional differences in role mix persist after controlling for agency size, indicating that they reflect genuine structural variation in how regions staff their clinical workforce rather than differences in the volume distribution of agencies within each region (EMT FTE: likelihood ratio test $p < 0.001$; paramedic FTE: $p < 0.001$).

Agencies use a range of human resource benchmarking and retention practices (**Table 14**).

Table 14 *Human resource benchmarking and retention strategies (Q16, Q17).*

Practice or strategy	Agencies (n)	Percent of respondents
Human resource practice benchmarks (Q16)		
Salary comparison	171	92.4%
Benefit comparison	156	84.3%
Turnover rates	90	48.6%
Team satisfaction scores	65	35.1%
Morale and retention strategies (Q17)		
Tuition reimbursement	192	87.3%
Recognition/rewards	176	80.0%
Career advancement	157	71.4%
Wellness programs	141	64.1%
Bottom-up communication mechanism	102	46.4%
Monitoring employee satisfaction	85	38.6%
Flexible schedules	76	34.5%
Personal financial planning services	73	33.2%
Bonuses	36	16.4%
Childcare (reimbursement)	5	2.3%
Childcare (onsite)	4	1.8%

Source: *2026 FL EMS Agency Survey. Both are multiple-response items; percentages are of agencies answering each item and sum to more than 100. Q16 responding n = 185; Q17 responding n = 220.*

Among the 185 agencies answering the benchmarking item, salary comparison (92.4 percent) and benefit comparison (84.3 percent) are near-universal, while fewer track turnover rates (48.6 percent) or team satisfaction scores (35.1 percent). Among the 220 agencies answering the retention item, the most common strategies are tuition reimbursement (87.3 percent), recognition and rewards (80.0 percent), career advancement (71.4 percent), and wellness programs (64.1 percent). Strategies aimed at communication and work-life flexibility are less common, including a bottom-up communication mechanism (46.4 percent), monitoring of employee satisfaction (38.6 percent), and flexible schedules (34.5 percent). Childcare support is rare, offered through reimbursement or onsite provision by fewer than 3 percent of agencies.

The relationship between human resource practice intensity and vacancy burden runs contrary to a simple interpretation of retention effort reducing vacancies. The number of retention strategies (Q17) is not significantly associated with vacancy rates in either direction

for EMT or paramedic roles (Spearman rho < 0.13, all p > 0.08), and agencies with at least one vacancy report the same median number of retention strategies as those without (both medians 5; Mann-Whitney p > 0.26). Benchmarking practice intensity (Q16), by contrast, is positively associated with vacancy rate (i.e., agencies tracking more human resource benchmarks carry higher vacancy rates for both EMTs and paramedics (rho = 0.22 and 0.17 respectively; both p < 0.05)), a relationship that persists for paramedic vacancies after controlling for cohort (partial rho = 0.16, p = 0.04). The most plausible interpretation is that **agencies under greater workforce pressure adopt more systematic human resource monitoring in response to that pressure rather than in anticipation of it**. The cross-sectional design precludes causal inference, but the pattern is more consistent with a reactive than a proactive human resource posture.

Reported turnover is concentrated at the lower end of the scale (**Table 15**).

Table 15 *Annual turnover rate (Q18).*

Annual turnover rate	Agencies (n)	Percent of respondents
0-5%	103	47.2%
6-10%	49	22.5%
11-15%	23	10.6%
16-20%	17	7.8%
21-25%	8	3.7%
26-30%	9	4.1%
> 30%	9	4.1%
Total responding	218	100.0%

Source: *2026 FL EMS Agency Survey; responding n = 218. Single-select banded estimate of agency annual turnover.*

Of 218 agencies, 69.7 percent reported annual turnover of 10 percent or less (47.2 percent at 0 to 5 percent and 22.5 percent at 6 to 10 percent), while 11.9 percent reported turnover above 20 percent. Turnover patterns are strongly differentiated by organization type. Fire departments report markedly lower turnover than non-fire agencies: 81.7 percent of fire-based respondents reported annual turnover of 10 percent or less, compared with 45.1 percent of non-fire agencies, and the median turnover band for fire agencies falls in the 0–5 percent range against 11–15 percent for non-fire agencies (Mann-Whitney p < 0.001). Private non-hospital agencies report the highest turnover of any organizational type, with 38.5 percent reporting annual rates above 20 percent. In the joint model controlling for cohort, region, and rural designation, organization type, specifically fire versus non-fire status, is the sole significant predictor of turnover (p < 0.001), with region, cohort, and rural designation

contributing nothing independent of it (all $p > 0.10$; adjusted $R^2 = 0.19$). Neither volume cohort, region, nor rural designation contributes independently once fire status is held constant (all $p > 0.10$). **The concentration of low turnover statewide therefore reflects the predominance of fire-based service delivery in Florida rather than uniformly stable retention across agency types**.

Full-time base salary rises with role and seniority (**Table 16**).

Table 16 *Full-time base salary range by role (Q19, Q20).*

Salary band	EMT entry-level (n = 117)	EMT top-out (n = 109)	Paramedic entry-level (n = 214)	Paramedic top-out (n = 205)
<$20,000	3 (2.6%)	1 (0.9%)	1 (0.5%)	1 (0.5%)
$20,001 to $40,000	31 (26.5%)	5 (4.6%)	17 (7.9%)	2 (1.0%)
$40,001 to $60,000	69 (59.0%)	30 (27.5%)	92 (43.0%)	16 (7.8%)
$60,001 to $80,000	14 (12.0%)	38 (34.9%)	95 (44.4%)	57 (27.8%)
$80,001 to $100,000	0 (0.0%)	19 (17.4%)	9 (4.2%)	67 (32.7%)
>$100,000	0 (0.0%)	16 (14.7%)	0 (0.0%)	62 (30.2%)

Source: *2026 FL EMS Agency Survey. Banded estimates of full-time base salary at entry level and top-out. EMT salary (Q19) displayed to BLS-capable agencies; paramedic salary (Q20) to ALS-capable agencies. Percentages are within each column.*

For EMTs, entry-level pay clusters in the $40,001 to $60,000 band (59.0 percent of the 117 BLS-capable agencies reporting), while top-out EMT pay shifts upward, with 32.1 percent reporting more than $80,000. For paramedics, entry-level pay is split between the $40,001 to $60,000 and $60,001 to $80,000 bands (43.0 and 44.4 percent of the 214 ALS-capable agencies reporting), and top-out paramedic pay is markedly higher, with 62.9 percent reporting more than $80,000 and 30.2 percent reporting more than $100,000.

Base salary is associated with both organization type and, for top-out pay, agency size. **Fire-based agencies report systematically higher salary bands than non-fire agencies** across all four salary measures (e.g., one full band higher at both entry and top-out for EMT and paramedic roles) and this difference is significant and independent of cohort and region in adjusted models (entry $p < 0.001$, top-out $p < 0.001$). Volume cohort does not significantly predict entry-level salary once fire status is controlled ($p = 0.14$), suggesting that competitive entry pay is relatively uniform across agency sizes within organizational type. Top-out salary, however, does scale with cohort after controlling for fire status and region ($p = 0.002$), with Cohort 1 agencies reporting markedly lower top-out pay than all others (median $40–60k against $80–100k for Cohorts 2–5). Region contributes independently to both entry and top-out salary: the Northeast reports lower entry-level paramedic pay than the Southeast even after accounting for fire status and cohort ($p < 0.001$), a finding that warrants consideration alongside the regional workforce composition differences identified earlier in this chapter.

Rural designation is not a significant predictor of salary at any level once organizational type and cohort are held constant (both p > 0.37).

Entry-level salary is inversely associated with vacancy burden. Agencies offering higher entry-level pay carry lower proportional vacancy rates for both paramedics and EMTs, a relationship that persists after controlling for volume cohort and fire status (PM entry: partial Spearman rho = −0.23, p = 0.003; EMT entry: rho = −0.43, p < 0.001). Top-out salary, by contrast, is not significantly associated with vacancy rates in adjusted analyses for either role (both p > 0.09), and agencies with and without paramedic vacancies report identical median top-out pay bands. This pattern suggests that **competitive entry compensation is more closely linked to recruitment success than career-ceiling pay, which may reflect differences in tenure rather than market competitiveness**. As with all cross-sectional associations, the direction of causality cannot be established. Agencies under greater vacancy pressure may also face constraints on entry pay, but the finding is consistent with the interpretation that entry salary functions as a recruitment signal in a competitive labor market.

Discussion

The pattern across the staffing measures points to paramedic availability, rather than EMT availability, as the primary workforce constraint for most Florida EMS agencies, a finding that is consistent with national EMS workforce research. National analyses indicate persistent challenges in sustaining the paramedic workforce, driven in part by barriers in the educational pipeline and attrition prior to certification. Recent national data show that approximately 21% of paramedic students do not complete training programs and an additional 11% fail to obtain certification, representing a substantial loss from the potential workforce before entry (Ball et al., 2023). At the same time, multi-state longitudinal analyses demonstrate ongoing workforce churn, with only about 74–77% of clinicians remaining continuously active in-patient care roles over time, reinforcing the difficulty of sustaining an adequate ALS workforce (Kurth et al., 2023).

The distinction observed in Florida, where EMT vacancies are proportionally higher but concentrated while paramedic shortages are diffuse across agencies, aligns with these structural dynamics. EMT supply is more responsive due to shorter training timelines and lower barriers to entry, while paramedic supply is constrained by longer and more complex educational pathways. Florida's finding that shortage prevalence does not vary significantly by cohort, region, or rural designation is somewhat more uniform than national patterns, however. National studies consistently demonstrate more pronounced workforce strain in

rural EMS systems, where agencies are more likely to rely on volunteer staffing, report being understaffed, and face barriers to both training access and workforce retention (Freeman et al., 2009). The elevated, but not statistically significant, shortage rates observed among Florida's rural agencies are therefore directionally consistent with national findings.

The retention profile observed in Florida also reflects trends documented nationally. Workforce research indicates that burnout and job-related stress are widespread among EMS clinicians and are strongly associated with increased absenteeism and intent to leave the profession. National survey data indicate that over 50% of EMS clinicians report personal or work-related burnout, with paramedics experiencing higher levels than EMTs, and that burnout is linked to significantly greater likelihood of workforce exit (Powell et al., 2025). Within this context, the reliance on compensation-adjacent retention strategies observed in Florida, such as tuition reimbursement and career development, is consistent with national practice, though evidence suggests these approaches may not fully address underlying drivers of attrition.

A key point of contrast between Florida and the national workforce literature lies in turnover. Florida reports comparatively low agency-level turnover, with most agencies under 10 percent annually, whereas national workforce analyses suggest substantially higher rates of workforce exit over time. Multistate cohort studies indicate that a meaningful share of EMS clinicians leave active patient care roles during typical certification cycles, contributing to ongoing instability in staffing levels (Kurth et al., 2023). The lower turnover observed in Florida appears to be structurally driven by the predominance of fire-based agencies, which are generally associated with more stable employment conditions than private-sector EMS organizations. The higher turnover observed among private non-hospital agencies within Florida is consistent with national patterns of greater workforce instability outside fire-based systems.

The wage findings similarly align with national labor market structure. Paramedics command a clear wage premium over EMTs due to differences in training requirements and clinical scope. National data indicate median annual wages of approximately $58,410 for paramedics compared to $41,340 for EMTs, reflecting this differential (U.S. Bureau of Labor Statistics, 2024). The inverse relationship observed in Florida between entry-level compensation and vacancy burden is consistent with national evidence that **recruitment, rather than retention, is a primary constraint on workforce capacity**. Given the significant attrition within paramedic training programs and barriers to workforce entry, compensation at the point of hire likely functions as an important signal influencing candidates' decisions to enter or join EMS agencies.

Finally, the regional variation in staffing mix observed in Florida, particularly differences in EMT-to-paramedic ratios, reflects the broader heterogeneity of EMS system design in the United States. National analyses emphasize that EMS systems are locally configured and vary widely in workforce composition and scope of practice depending on demand, resources, and organizational structure (MacKenzie & Carlini, 2013). The regional differences observed in Florida are therefore consistent with national experience and likely reflect differences in workforce supply, cost structure, and system design rather than a singular underlying cause.

Florida's workforce findings align with national EMS trends in identifying paramedic supply as the dominant system constraint while diverging in the relatively low observed turnover associated with the structural predominance of fire-based agencies. The coexistence of system-wide paramedic scarcity with comparatively stable workforce retention suggests that workforce challenges in Florida are more strongly tied to recruitment and training pipeline limitations than to elevated attrition rates.

Limitations

Two agency records reported current vacancies exceeding budgeted positions, a logically impossible combination, and were excluded from the aggregate vacancy-rate calculations while retained in the position and FTE totals. The benchmarking and retention items are multiple-response, so their percentages are of agencies answering each item and do not sum to 100. Salary and several workforce items were displayed conditionally on service level, so the EMT salary distribution reflects BLS-capable agencies and the paramedic salary distribution reflects ALS-capable agencies. Salary and turnover are captured as banded estimates rather than exact figures, which precludes computation of means. Item-level response counts vary across the workforce questions, and all denominators are stated in the table notes. Full-time-equivalent and position totals are sums across responding agencies and are not statewide personnel counts. The survey did not collect projected workforce need at one-, five-, and ten-year horizons, so the chapter characterizes current capacity and present shortfall rather than forecast demand.

Observed associations between salary bands and vacancy rates, and between benchmarking intensity and vacancy burden, are cross-sectional and cannot establish direction of causality. Agencies under greater workforce pressure may simultaneously report lower entry pay and higher monitoring intensity, with both conditions reflecting the same underlying constraint rather than one causing the other.

Turnover analysis relies on organization type as a single-select self-reported classification, as noted in Chapter 2. Agencies with hybrid structures are represented by their primary designation, and the fire-versus-non-fire distinction driving turnover differences may therefore misclassify a small number of agencies operating under blended models.

Findings stratified by rural designation, including the higher shortage trend and lower retention strategy breadth in rural agencies, are based on 42 rural respondents and should be interpreted cautiously. The rural subsample is insufficient to support definitive conclusions, and the directional observations noted in the Discussion are intended to flag hypotheses for future survey cycles rather than to characterize the rural EMS workforce with precision.

Chapter 4 | Medical Care

BEMO Domain: Time-sensitive diagnoses event efforts

The Medical Care module examines how agencies organize clinical care for time-sensitive conditions, where rapid recognition and protocol-driven treatment affect outcomes. It covers the use of structured team approaches to time-sensitive diagnoses, barriers to stroke care, participation in stroke awareness programs and coalitions, adoption of a novel resuscitation bundle of care, and motorcycle-related trauma transport practices. Several items were shown only to 9-1-1 responding agencies, for whom these activities are operationally relevant, and the applicable denominators are stated in each table. Structured team approaches are nearly universal for cardiac arrest but applied less consistently to other time-sensitive conditions, with the Panhandle showing narrower protocol breadth across multiple measures. Stroke coalition participation follows a clear volume gradient, with larger agencies substantially more likely to maintain formal coalition relationships, and agencies engaged in stroke awareness programs are more likely to have operationalized a structured team response for stroke. Adoption of the resuscitation bundle and motorcycle trauma protocol each remains below 25 percent, with uptake driven by agency-level decisions not well predicted by size, organization type, region, or rural designation.

Results

Among the 189 9-1-1 responding agencies, 156 reported using a structured pit crew team approach for at least one time-sensitive diagnosis (**Table 17**).

Table 17 *Time-sensitive diagnosis "pit crew" team approach (Q22).*

Time-sensitive diagnosis	Agencies (n)	Percent of respondents
Cardiac arrest	154	98.7%
Trauma	79	50.6%
Stroke	63	40.4%
ST-elevation myocardial infarction	58	37.2%
Sepsis	36	23.1%
Burns	1	0.6%
Airway	1	0.6%

Source: *2026 FL EMS Agency Survey. Multiple-response item shown to 9-1-1 responding agencies (189 displayed; 156 answered). Percentages are of the 156 responding agencies and sum to more than 100.*

The approach is nearly universal for cardiac arrest, used by 154 agencies (98.7 percent of respondents), and applied less often to other conditions: trauma (79, 50.6 percent), stroke (63, 40.4 percent), ST-elevation myocardial infarction (58, 37.2 percent), and sepsis (36, 23.1 percent). Burns and airway management were each named by a single agency. Adoption of the pit crew approach is effectively universal among 9-1-1 responding agencies, with every agency answering the item reporting that it was used for at least one diagnosis, precluding any meaningful subgroup comparison on adoption alone. Variation exists in the breadth of application beyond cardiac arrest. In a joint model controlling for agency size, organization type, and rural designation, region is the only significant predictor of non-cardiac pit crew breadth (likelihood ratio test $p = 0.023$), driven primarily by the Panhandle, where agencies apply the approach to fewer non-cardiac conditions than agencies in other regions ($p = 0.011$). No other predictor approaches significance, indicating that the extension of structured team approaches beyond cardiac arrest does not vary systematically by agency size, fire status, or rural designation across the state.

Stroke care presents recognized barriers and uneven program engagement (**Table 18**).

Table 18 *Stroke recognition barriers, awareness programs, and coalition participation (Q23, Q24, Q27).*

Item	Agencies (n)	Percent
Barriers to stroke recognition and treatment (Q23; 51 agencies reporting barriers)		
Availability or cost of training	36	70.6%
Training	23	45.1%
Other	8	15.7%
Stroke awareness program (Q24; responding n = 188)		
Conducts or participates	56	29.8%
Does not	132	70.2%
Stroke coalition participation (Q27; responding n = 186)		
Participates	61	32.8%
Does not	125	67.2%

Source: *2026 FL EMS Agency Survey. Items shown to 9-1-1 responding agencies. Q23 is multiple-response among the 51 agencies reporting one or more barriers; Q24 and Q27 are single-select (responding n = 188 and 186).*

Of the 9-1-1 responding agencies, 51 reported one or more barriers to stroke recognition and treatment, and among these the availability or cost of training was the most common barrier (36, 70.6 percent), followed by training more generally (23, 45.1 percent). Formal stroke programs are not widespread. A stroke awareness program is conducted or participated in by 29.8 percent of responding agencies (56 of 188), and 32.8 percent participate in a stroke

coalition (61 of 186). Among coalition participants, the most frequently named bodies were the South Florida, Northeast Florida, and Central Florida stroke coalitions.

Stroke program and coalition participation both vary by agency size, though in different ways. Stroke awareness program participation varies significantly by volume cohort in unadjusted analysis (chi-square $p = 0.015$, Cramér's $V = 0.27$), though the relationship is non-linear: participation is highest in Cohorts 2 and 5 (both 44.4%) and lowest in Cohort 3 (17.7%). No single predictor accounts for this pattern in the joint model, suggesting that program participation reflects agency-level decisions not well captured by size, type, region, or rural status alone. Stroke coalition participation, by contrast, follows a clear and independent cohort gradient: participation rises from 11.4 percent of Cohort 2 agencies to 65.4 percent of Cohort 5 agencies, and volume cohort is the sole significant predictor in the adjusted model ($p < 0.001$), with region, rural designation, and fire status contributing nothing independent of size. Neither measure varies significantly by region, rural designation, or organization type in adjusted analyses.

Whether agencies translate stroke preparedness into structured team response is a related but distinct question. Stroke pit crew adoption does not vary significantly by agency size, organization type, region, or rural designation in unadjusted analyses. In a joint model controlling for all four variables, two predictors emerge as significant: agencies participating in a stroke awareness program are more likely to use a pit crew approach for stroke ($p = 0.029$), suggesting that program engagement and operationalized team response are associated aspects of stroke preparedness; and Panhandle agencies are less likely to use stroke pit crew than Southeast agencies of equivalent size and type ($p = 0.014$), consistent with the pattern of narrower clinical protocol adoption observed in that region. Stroke coalition participation does not predict pit crew adoption independently of program participation, indicating that formal coalition membership and structured team response represent distinct dimensions of stroke engagement rather than a single continuum.

The committee identified three emerging clinical practices for inclusion in the 2026 survey: a particular resuscitation bundle of care, intent to adopt it among non-performing agencies, and adoption of a motorcycle trauma transport protocol (**Table 19**).

Table 19 *Resuscitation bundle of care and motorcycle trauma transport protocol (Q30, Q31, Q33).*

Item	Agencies (n)	Percent
Performs resuscitation bundle of care (Q30; responding n = 229)		
Yes	51	22.3%
No	178	77.7%
Plans to implement bundle in 12 to 24 months (Q31; among 178 not performing)		
Yes	24	13.5%
No	154	86.5%
Follows motorcycle-related trauma transport protocol (Q33; responding n = 229)		
Yes	47	20.5%
No	182	79.5%

Source: *2026 FL EMS Agency Survey. Q30 and Q33 shown to all agencies (responding n = 229). Q31 shown to agencies not performing the bundle (responding n = 178). The bundle comprises heads-up CPR with an impedance threshold device.*

A resuscitation bundle of care comprising heads-up CPR with an impedance threshold device is performed by 51 agencies (22.3 percent of 229 responding). Among the 178 not performing it, 24 (13.5 percent) plan to implement it within 12 to 24 months, and 32.5 percent of those with no current or planned adoption requested further information (50 of 154). Bundle adoption does not vary significantly by volume cohort, region, organization type, or rural designation in unadjusted or adjusted analyses (all $p > 0.09$), suggesting that uptake reflects agency-level clinical and operational decisions rather than structural characteristics.

A motorcycle-related trauma transport protocol, which addresses a distinct clinical domain, is followed by 47 agencies (20.5 percent of 229 responding). No implementation intent or information-interest follow-up was asked for this item. Motorcycle protocol adoption is higher among fire-based agencies than non-fire agencies (25.5 versus 11.3 percent; Fisher's exact $p = 0.014$), the only significant predictor in unadjusted analysis. In a joint model controlling for cohort, region, and rural designation, fire status approaches but does not reach significance ($p = 0.051$), and no other predictor is significant. As with the resuscitation bundle, adoption appears to reflect agency-level clinical decisions more than structural characteristics, with the fire-status association possibly reflecting protocol standardization within fire department EMS systems. Agencies with a trauma pit crew approach are no more likely to follow a motorcycle protocol than those without one (28.6 versus 19.5 percent; Fisher's exact $p = 0.26$), suggesting that uptake of each reflects independent agency-level clinical and operational decisions rather than a general posture toward protocol adoption.

Discussion

Structured, protocol-driven care, often operationalized as “pit crew” models, is well established for cardiac arrest in Florida, a finding that is consistent with national evidence demonstrating the effectiveness of coordinated, role-based resuscitation. Implementation of structured, team-based cardiac arrest protocols emphasizing predefined roles and minimized interruptions has been associated with significant improvements in survival and neurologically intact outcomes in out-of-hospital cardiac arrest (Hopkins et al., 2016). The markedly lower uptake of similar team-based approaches for other time-sensitive conditions in Florida, however, reflects a broader national pattern in which protocol standardization is most mature and evidence-driven for cardiac arrest but remains less consistently implemented for trauma, stroke, ST-elevation myocardial infarction (STEMI), and sepsis. The pit crew terminology and model are specific to cardiac arrest in the literature. Trauma uses analogous parallel-task team concepts (horizontal approach, Crew Resource Management (CRM)) (Hughes et al., 2014; Tiel Groenestege-Kreb et al., 2014), while STEMI, stroke, and sepsis rely on regionalized systems of care and rapid-response activation protocols that share the philosophy of coordinated team response but are not described as "pit crew" models.

National literature suggests that this uneven adoption is not due to a lack of clinical importance but rather to differences in evidence maturity, operational complexity, and system integration. For stroke, prehospital care has increasingly shifted toward system-based models emphasizing coordinated networks, standardized triage, and prehospital notification, with evidence demonstrating that adherence to EMS stroke quality metrics improves downstream treatment times and outcomes (Oostema et al., 2024; Zachrison et al., 2023). Florida’s finding that stroke coalition participation is associated with greater adoption of structured care aligns closely with this literature, which emphasizes that participation in organized systems of care rather than agency characteristics alone drives improvements in prehospital practice. The clear volume gradient observed in coalition participation in Florida further parallels national experience, where smaller agencies often face administrative and resource constraints that limit engagement in regional systems despite clinical benefit.

The relatively low adoption of structured approaches for sepsis in Florida is also consistent with national evidence indicating that prehospital sepsis care remains less mature and more difficult to operationalize than cardiac arrest or stroke. Systematic reviews have found substantial variability in EMS recognition and treatment of sepsis, with wide variation in diagnostic sensitivity and limited high-quality evidence guiding prehospital interventions (Lane et al., 2016). Implementation studies similarly identify provider engagement, training, and protocol complexity as major barriers to uptake of prehospital sepsis programs

(Garfinkel et al., 2020). The prominence of training availability and cost as barriers in Florida is therefore strongly aligned with national findings and reflects a broader challenge in translating emerging clinical priorities into standardized field practice.

The low adoption rates observed for newer practices such as heads-up CPR (Moore, 2023) and specialized trauma protocols likely reflect their position earlier in the evidence and implementation lifecycle. Even for trauma, where prehospital care is well established, there is less consensus around optimal field interventions and team-based approaches compared to cardiac arrest. Meta-analyses of ALS versus BLS trauma care, for example, have shown inconsistent or absent survival benefit from more advanced prehospital interventions, underscoring ongoing uncertainty in optimal prehospital management strategies (Kondo et al., 2021). This contrasts sharply with cardiac arrest, where the evidence base is more definitive and has supported widespread adoption of highly standardized, team-based care models. A Miami-Dade County study of on-scene motorcycle fatalities found that 32% of deaths were potentially survivable, primarily due to airway compromise (23%) and exsanguination (7%) (Lu et al., 2020). The authors recommended automatic alert systems in motorcycles and first-responder airway training to reduce preventable deaths, rather than a motorcycle-specific transport protocol per se (Lu et al., 2020). Florida's finding that adoption of different emerging practices does not cluster at the agency level is consistent with the national pattern, suggesting that uptake is driven by condition-specific evidence and external program integration rather than a generalized propensity toward innovation.

The limited variation in novel protocol adoption by agency size, organization type, or rural designation within Florida is also notable in a national context. While national EMS literature frequently documents differences in clinical capability and program participation across rural and urban systems, particularly for conditions requiring coordination with specialty centers, much of this variation is mediated through participation in formal systems of care rather than intrinsic agency characteristics (Zachrison et al., 2023). Florida's findings therefore suggest that once program participation is accounted for, structural factors such as size or geography may play a more limited independent role in determining adoption of structured care practices.

In contrast, the regional variation observed within Florida, particularly the lower uptake of structured approaches in the Panhandle, is consistent with national evidence showing that protocol adoption often tracks with differences in regional system integration, resource availability, and policy environments rather than purely organizational characteristics. Variation in stroke system coordination and EMS-hospital integration across states and

regions has been widely documented and is associated with differences in both protocol adoption and patient outcomes (Ye et al., 2025).

Overall, Florida's findings align with national EMS literature in demonstrating that structured, protocol-driven care is most advanced and consistently implemented where the evidence base is strongest and where formal systems of care support adoption. The extension of these approaches to other time-sensitive conditions appears to depend less on agency characteristics and more on access to training, participation in coordinated clinical programs, and the maturity of the supporting evidence. The observed gaps in adoption outside cardiac arrest therefore reflect not an absence of clinical priority, but the broader national pattern of uneven diffusion of emerging prehospital care models across conditions.

Limitations

The pit crew, barriers, and stroke program items were shown only to 9-1-1 responding agencies, so they describe that segment rather than all respondents, and the barriers item reflects only the 51 agencies that reported a barrier rather than the full 9-1-1 pool. Multiple-response items are reported as a percentage of agencies answering and do not sum to 100. Program participation and protocol adoption are self-reported and not independently verified. The information-request items indicate interest at the time of the survey and do not commit agencies to action.

The absence of significant structural predictors for resuscitation bundle and motorcycle protocol adoption should not be interpreted as evidence that adoption is random. The survey does not capture medical director preference, protocol history, availability of required equipment such as impedance threshold devices, or agency-level awareness of the evidence base, any of which may account for substantial variation in uptake that the available predictors cannot explain.

The association between stroke program participation and stroke pit crew adoption is cross-sectional and the direction of causality cannot be established. Agencies that have already operationalized a structured stroke response may be more likely to seek out formal program engagement, rather than program participation driving protocol adoption. Longitudinal data would be required to distinguish between these interpretations.

Chapter 5 | Health, Safety, and Wellness

BEMO Domain: EMT and paramedic mental health and wellness

The Health, Safety, and Wellness chapter addresses behavioral health and wellness support for EMS personnel together with roadway safety training. It covers the components of agency behavioral health assistance programs, where responsibility for mental health oversight sits, the curriculum used for mental health training and its minimum intensity, policies for staff seeking help, the perceived adequacy of local mental health providers, and access to traffic incident management training. Both the breadth of behavioral health program support and the formalization of mental health oversight scale markedly with agency size and organizational type, with fire-based and larger agencies offering substantially more than smaller non-fire providers. Training and policy adoption are more uniform across the system, though minimum suicide-prevention training falls short of universal coverage. The most geographically specific finding in the chapter is that rural agencies report dramatically lower perceived sufficiency of local mental health providers, a gap that persists after controlling for agency size, organizational type, and region, and that points to a geographic access problem rather than a resource one.

Results

Most agencies offer several behavioral health supports (**Table 20**).

Table 20 *Behavioral health assistance program components and mental health oversight (Q36, Q37).*

Component or arrangement	Agencies (n)	Percent of respondents
Behavioral health assistance program components accessible (Q36; n = 226)		
Employee assistance program	192	85.0%
Critical incident stress management	165	73.0%
Peer support	151	66.8%
Chaplain program	129	57.1%
Licensed mental health professional	90	39.8%
Wellness program	90	39.8%
Therapy dog	66	29.2%
None of the above	13	5.8%
Other	9	4.0%
Primary responsibility for mental health oversight (Q37; n = 221)		
Part of another person's duties	121	54.8%
Health and Safety Officer	67	30.3%
Full-time dedicated position	36	16.3%
Other	33	14.9%
Part-time dedicated position	7	3.2%

Source*: 2026 FL EMS Agency Survey. Both items are multiple-response; percentages are of agencies answering each item and sum to more than 100. Q36 responding n = 226; Q37 responding n = 221.*

Among the 226 agencies responding, the most common components are an employee assistance program (85.0 percent), critical incident stress management (73.0 percent), and peer support (66.8 percent), followed by a chaplain program (57.1 percent). Access to a licensed mental health professional and to a wellness program is less common (39.8 percent each), and 13 agencies (5.8 percent) reported none of the listed components. Responsibility for mental health oversight is rarely a dedicated role. Among 221 agencies, oversight is most often part of another person's duties (54.8 percent) or assigned to a Health and Safety Officer (30.3 percent), while only 16.3 percent maintain a full-time dedicated position and 3.2 percent a part-time one.

The degree of behavioral health support available to agency staff reflects both organizational type and operational scale (**Figure 6**). Fire-based agencies consistently offer more

components than non-fire agencies across every volume cohort, a pattern visible throughout the distribution rather than driven by a small number of outlying agencies. Among the smallest agencies, the difference is already present: fire-based Cohort 1 agencies report a median of three components while their non-fire counterparts report fewer than one. That gap narrows somewhat in the mid-volume cohorts but does not close, and by Cohort 5 fire agencies offer a median of six of the seven listed components while non-fire agencies of equivalent volume offer four.

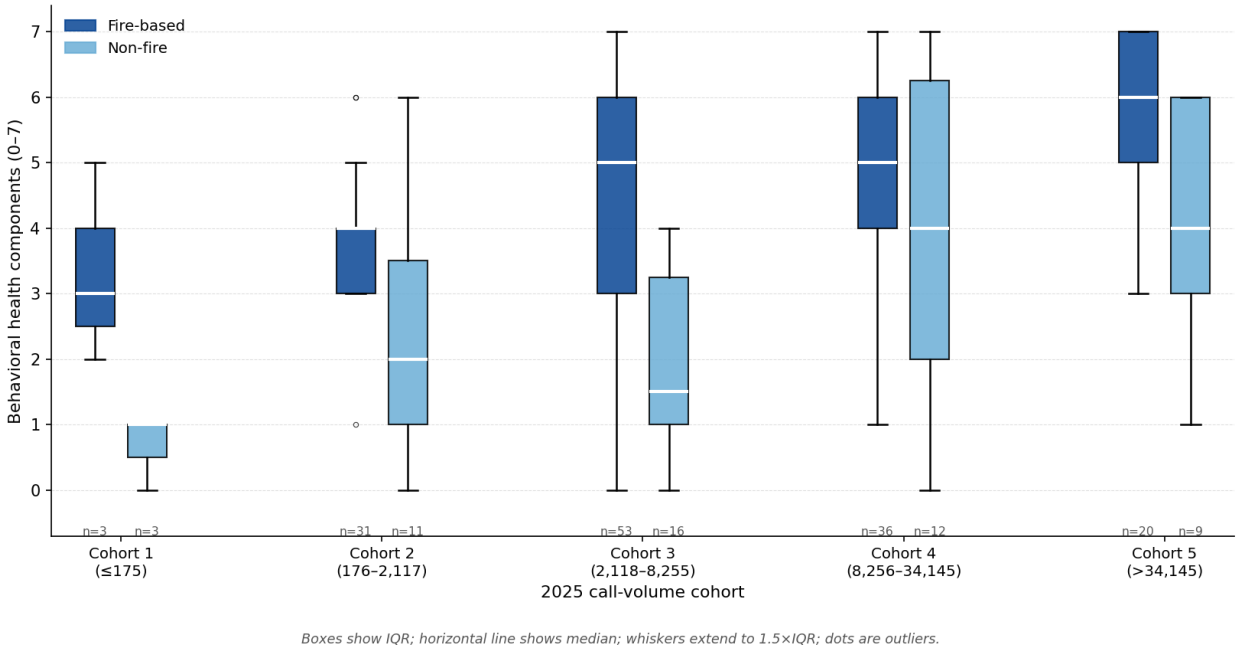

Figure 6 *Number of behavioral health assistance program components accessible to staff, by 2025 call-volume cohort and organization type, among agencies reporting (n varies by cohort; see labels).*

Note: *Boxes show the interquartile range; horizontal lines show medians; whiskers extend to 1.5 times the IQR; points beyond the whiskers are individual agencies. Fire-based and non-fire agencies are shown as paired boxes within each cohort. Both volume cohort and fire status are significant independent predictors of component breadth (both $p < 0.001$, adjusted $R^2 = 0.31$). The maximum possible score is seven components.*

The cohort gradient is as striking as the fire difference. Regardless of organizational type, agencies handling more calls offer more behavioral health support; not marginally more, but substantially so. The interquartile ranges for Cohorts 1 and 2 sit almost entirely below those of Cohorts 4 and 5, meaning that a typical large agency offers more components than nearly all small agencies. This is not a ceiling effect. Even at Cohort 5, the distributions do not compress against the maximum of seven, indicating that there remains meaningful variation in how comprehensively even the largest agencies support their staff.

The two predictors operate independently. A large non-fire agency offers more than a small fire agency, and a small fire agency offers more than a small non-fire agency. Both size and organizational type carry independent weight, and neither substitute for the other. Smaller non-fire agencies (i.e., private providers and governmental non-fire services in the lower volume cohorts) face a compounded disadvantage on both dimensions simultaneously.

Both volume cohort and fire status are significant independent predictors of component breadth in adjusted analysis (both $p < 0.001$, adjusted $R^2 = 0.31$). The median number of behavioral health components rises from 1.5 in Cohort 1 to 6 in Cohort 5, and fire agencies offer a median of five components compared with three for non-fire agencies. Rural agencies offer fewer components than non-rural agencies after controlling for cohort and fire status ($p = 0.042$), while region does not contribute independently once those factors are held constant.

Among individual components, access to a licensed mental health professional and a therapy dog show the strongest cohort gradients, rising from near zero in the smallest cohorts to majorities in Cohorts 4 and 5, while peer support is relatively consistent across Cohorts 2 through 5 and functions more as a baseline expectation than a size-dependent offering. Dedicated mental health oversight, a full- or part-time position with primary responsibility for mental health, is strongly cohort-dependent, present in only 7 percent of Cohort 2 agencies and 48 percent of Cohort 5 agencies (chi-square $p < 0.001$, Cramér's $V = 0.34$), with volume cohort the sole significant predictor after adjustment. Only one rural agency in the sample maintains any dedicated mental health oversight position, a gap explained by the concentration of small agencies in rural settings rather than by rural designation independently.

Mental health training relies largely on internal resources, and formal policy is widespread while training intensity is lower (**Table 21**).

Table 21 *Mental health training, policy, and safety measures (Q38, Q39, Q40, Q41, Q35).*

Item	Agencies (n)	Percent
Mental health training curriculum (Q38; n = 222)		
Internal training	129	58.1%
Program by a local provider	103	46.4%
Mental Health First Aid	28	12.6%
Other	24	10.8%
Struggle Well	21	9.5%
None	7	3.2%
Training, policy, and safety measures (share answering Yes)		
Minimum 3 hours suicide-prevention training annually (n = 226)	139	61.5%
Policy for staff seeking behavioral health help (n = 228)	200	87.7%
Perceives sufficient local mental health providers for first responders (n = 227)	119	52.4%
Provides or has access to traffic incident management training (n = 181)	91	50.3%

Source: *2026 FL EMS Agency Survey. Q38 is multiple-response (responding n = 222). The remaining rows report the share answering Yes; denominators are stated per row. Q35 (traffic incident management) was shown to ground 9-1-1 responding agencies.*

Among the 222 agencies answering, training is most often delivered through internal training (58.1 percent) or a program developed by a local provider (46.4 percent), with Mental Health First Aid used by 12.6 percent. A policy for staff seeking help with job-related behavioral health issues is in place at 87.7 percent of agencies, but only 61.5 percent provide at least three hours of behavioral health suicide-prevention training annually. Perceptions of local capacity are divided: 52.4 percent of agencies feel there are sufficient local mental health providers trained for the needs of first responders, leaving nearly half who do not. Traffic incident management training reaches half of the ground 9-1-1 responding agencies to whom it was shown on the Survey (50.3 percent).

The pattern for mental health training and policy is notably different from that observed for program breadth. Formal policy for staff seeking behavioral health help is near-universal and does not vary by agency size, organization type, region, or rural designation. It functions as a baseline standard across the system. Training curriculum diversity follows a weak cohort gradient, with median training types rising from one in Cohorts 1 through 4 to two in Cohort 5, and fire agencies using slightly more training types than non-fire agencies (both $p < 0.01$ in adjusted analysis), but the overall range is narrow and the practical difference small. Provision of minimum three-hour suicide-prevention training is also relatively flat across cohorts, present in 51 to 71 percent of agencies with no significant gradient, suggesting that this minimum threshold is not being met as a function of size or resources alone.

The sharpest and most distinctive finding in this section concerns perceived access to local mental health providers. Satisfaction with local provider availability does not vary by volume cohort, fire status, or region. It is essentially 50 percent across every subgroup on those dimensions. Rural agencies, however, are a marked exception. **Only 21.4 percent of rural agencies perceive sufficient local mental health providers trained for the needs of first responders, against 59.4 percent of non-rural agencies** (Fisher's exact $p < 0.001$). Rural designation is the sole significant predictor in adjusted analysis ($p = 0.002$), independent of agency size, organization type, and region. This is not a resource or capacity problem of the kind seen elsewhere in this chapter. It is a geographic access problem, and one that persists regardless of how large or well-resourced a rural agency may be.

Discussion

Behavioral health support in Florida, broad in availability but shallow in dedicated ownership, closely reflects patterns described in the national EMS literature. Across U.S. first responder systems, there is substantial variability in program structure, with many agencies offering some combination of peer support, training, or referral pathways but lacking centralized oversight or dedicated leadership. This fragmentation is a recurring finding in studies of first responder mental health systems, where the presence of programs does not necessarily equate to coordinated or sustained implementation (Fisher & Lavender, 2023). The strong relationship between agency size and program breadth observed in **Florida mirrors national findings that larger agencies are more able to sustain formalized programs**, while smaller agencies rely on less resource-intensive approaches.

The convergence on peer support across Florida agencies regardless of size is also consistent with national and international practice. **Peer support programs are widely used in first responder organizations because they are low-cost, flexible, and culturally acceptable, particularly in environments where stigma limits engagement with traditional mental health services**. However, the evidence base for peer support remains limited, with research noting substantial gaps in evaluation and mixed findings on effectiveness (Bowers et al., 2025). This aligns closely with the Florida pattern: peer-based approaches are ubiquitous, but access to licensed mental health professionals (i.e., clinically intensive support) remains strongly resource-dependent.

More broadly, the overall burden of mental health conditions described in Florida is entirely consistent with national and international EMS literature. EMS providers experience significantly elevated rates of PTSD, depression, and burnout due to cumulative exposure to traumatic events, operational stress, and shift work (Alghamdi, 2022; Mountfort & Wilson,

2018). Internationally, ambulance personnel in the UK and Australia show similar or higher levels of distress, with PTSD prevalence reported far above the general population and burnout affecting a substantial portion of the workforce (Crawford-Clark, 2023; Reardon et al., 2020).

Where Florida diverges slightly from expectations is in the relationship between policy and implementation. The near-universal presence of formal help-seeking policies alongside much lower levels of structured training and uneven access to clinicians reflects a gap that has also been identified in national studies: policy adoption often outpaces operational capacity. Research on first responder systems consistently highlights that the availability of trained, culturally competent mental health providers, particularly those familiar with EMS work, is a limiting factor in program effectiveness (Fisher & Lavender, 2023). Florida's finding that perceived adequacy of providers is only ~50% statewide, and dramatically lower in rural areas, fits squarely within this national pattern.

The rural finding is especially well supported by broader literature. Access to appropriate mental health care for first responders is not simply a matter of agency resources but of geographic distribution of specialized providers. Studies emphasize that even well-funded agencies struggle to connect personnel with clinicians who understand first responder culture, and that rural areas face compounding barriers related to provider scarcity and distance (Fisher & Lavender, 2023). **Florida's sharp rural disparity therefore reflects a structural access problem rather than a programmatic or financial one.**

Internationally, the underlying mental health challenges in EMS appear broadly consistent with those observed in the United States. Studies of ambulance services outside the U.S. identify burnout, depersonalization, and psychological distress as major threats to workforce sustainability, with prevalence estimates for burnout ranging from 16% to over 50% depending on methodology (Reardon et al., 2020). The available literature suggests that these risks are intrinsic to the nature of paramedic work, driven by cumulative exposure to trauma, operational stress, and shift work, rather than specific to any single national system (Thomas, 2023).

The Florida finding that training depth is limited despite widespread policy adoption is therefore not anomalous but reflective of a broader issue in EMS systems globally: **mental health support is easier to endorse in policy than to operationalize at scale**.

Finally, the limited penetration of Traffic Incident Management (TIM) training represents a separate but related occupational risk domain. National safety guidance emphasizes TIM as a

critical component of responder safety, promoting coordinated, multi-agency practices to reduce injury and death at roadway incidents (Federal Highway Administration, 2025; National Highway Traffic Safety Administration, 2025a). Given the high exposure of EMS personnel to roadway hazards, Florida's finding that only half of responders have TIM training represents a measurable safety gap that is not typically framed within mental health discussions but is closely connected through cumulative occupational stress and risk exposure. This gap may reflect differences in access to training delivery mechanisms rather than differences in awareness or prioritization. In that context, TIM training may represent a practical example of how smaller or resource-constrained agencies experience broader limitations in accessing standardized programs, suggesting potential value in approaches that reduce administrative or logistical barriers to participation.

Limitations

The behavioral health component, oversight, and curriculum items are multiple-response and are reported as a percentage of agencies answering, so they do not sum to 100. Program components, oversight arrangements, and training are self-reported and not independently verified. The traffic incident management item was shown only to ground 9-1-1 responding agencies and describes that segment. Item-level response counts vary, and all denominators are stated in the table notes.

The perceived-adequacy item is a subjective assessment rather than an objective count of available providers. The finding that rural agencies report substantially lower perceived sufficiency reflects agency perceptions at the time of the survey and may capture differences in awareness of available resources, referral network familiarity, or expectations of provider competence in first-responder mental health, in addition to or instead of objectively fewer providers in those areas. Survey data alone cannot distinguish between these explanations, and the finding should be interpreted alongside independent assessments of mental health provider supply and distribution in rural Florida.

The association between agency size and behavioral health program breadth is interpreted throughout as reflecting differential resource availability, but the survey does not measure behavioral health budget allocation, program utilization, or staffing ratios dedicated to wellness. Observed differences across volume cohorts and organizational types may therefore reflect differential prioritization or awareness as much as differential capacity. Longitudinal data linking resource investment to program adoption would be required to establish the resource mechanism more directly.

Chapter 6 | Access to Care

BEMO Domain: MIH; Substance use programs; Public health efforts and integration with County Health Departments

The Access to Care module examines how agencies extend services beyond traditional emergency response. It covers community paramedicine and MIH programs and their structural characteristics, integration with county health departments and other community partners, substance use response including care coordination and medication-assisted treatment, alternative-destination transport, and telehealth. MIH program adoption scales with agency size across most of the state. The Panhandle is a notable exception, where adoption is disproportionately high relative to agency volume, a pattern consistent with need-driven implementation in a region carrying the state's highest per capita opioid burden. Substance use disorder (SUD) response activities, including both care coordination and medication-assisted treatment, are strongly concentrated among MIH-operating agencies rather than distributed broadly across the EMS system.

Results

MIH remains a minority activity in Florida's EMS system (**Table 22**).

Table 22 *Access to care, mobile integrated healthcare, and substance use response (Q42, Q44, Q45, Q46, Q47, Q48, Q49, Q57).*

Item	Agencies (n)	Percent
Care access and MIH/CP integration		
Operates a community paramedicine or MIH program (n = 215)	47	21.9%
Written agreement with county health department (n = 213)	42	19.7%
MIH/CP program connected to county health department (MIH agencies; n = 47)	31	66.0%
Transports 9-1-1 patients to alternative non-ED destinations (n = 131)	6	4.6%
Uses telehealth for triage, treatment, or referral (n = 228)	32	14.0%
Substance use response		
Provides care coordination for SUD recovery (n = 130)	42	32.3%
Provides buprenorphine or other medication-assisted treatment (n = 188)	35	18.6%
Transports from 9-1-1 scenes to non-hospital SUD specialty care (n = 131)	5	3.8%

Source: *2026 FL EMS Agency Survey. Each row reports the share answering Yes; denominators are stated per row. Q45, Q46, and Q47 were shown to ground 9-1-1 responding agencies. Q49 was shown to the 47 agencies operating a program.*

About one in five agencies operate a community paramedicine or MIH program (21.9 percent, 47 of 215), and a similar share hold a written agreement with their county health department (19.7 percent). Telehealth for triage, treatment, or referral is used by 14.0 percent, and alternative-destination transport is rare among ground 9-1-1 responders (4.6 percent). Among the 47 program operators, two-thirds report that their program is connected to the county health department (66.0 percent).

MIH/CP program operation scales with agency size. Adoption rises from zero among Cohort 1 agencies to 46.7 percent in Cohort 5, with volume cohort the dominant predictor in adjusted analysis ($p < 0.001$). However, the regional distribution is more nuanced and runs counter to the size story in one notable respect. **The Panhandle, which has the smallest average agency size of any Florida region, reports the highest MIH adoption rate (47.1 percent**), a difference that persists after controlling for cohort, fire status, and rural designation ($p = 0.003$). Central Florida also shows higher adoption than the Southeast. Southwest and Northeast lag behind despite their larger average agency sizes. The regional pattern does not follow the resource gradient visible elsewhere in this report, suggesting that local system design decisions, county health department relationships, or historical program development play a role in MIH adoption independent of operational scale.

Health department agreement follows a similar but distinct pattern. Adoption is non-linear across cohorts (i.e., highest in Cohort 5 (44.8 percent) but also relatively common in Cohort 2 (22.0 percent) and lowest in Cohorts 3 and 4), and additionally, Southwest agencies are significantly more likely than Southeast agencies to hold a formal agreement after adjustment ($p = 0.046$). MIH-operating agencies are substantially more likely than non-MIH agencies to hold a health department agreement (37.0 versus 15.2 percent; $p = 0.003$) and to provide medication-assisted treatment for substance use disorders (53.3 versus 8.0 percent; $p < 0.001$), suggesting that MIH program operation is associated with a broader cluster of community health integration activities rather than existing in isolation.

Telehealth for triage, treatment, or referral and alternative-destination transport are too rare in the current sample (each present in fewer than five percent of eligible agencies) to support meaningful subgroup analysis. Their inclusion in the survey establishes a baseline for tracking adoption in future cycles.

Substance use response follows a coordination-heavy, transport-light pattern (**Table 22**). About a third of ground 9-1-1 responders provide care coordination for patients seeking SUD recovery (32.3 percent), and 18.6 percent provide buprenorphine or other medication-assisted treatment, but direct transport from 9-1-1 scenes to non-hospital substance use

specialty care is almost absent (3.8 percent). Both care coordination and MAT provision are strongly predicted by MIH program status after controlling for all other agency characteristics: MIH agencies are far more likely to provide care coordination (LR test $p < 0.001$) and MAT (LR test $p < 0.001$), and once MIH status is held constant, cohort, rural designation, and region explain little additional variation in coordination. MAT provision retains an independent fire-status effect even after MIH adjustment (i.e., non-fire agencies are more likely to provide MAT than fire agencies of equivalent size and MIH status ($p = 0.029$)), and Northeast agencies are more likely to provide MAT than Southeast agencies of equivalent characteristics ($p = 0.041$). The regional variation in care coordination, (i.e., highest in the Panhandle (70.8 percent) and Central (60.0 percent), lowest in Southeast (16.7 percent) and Southwest (12.5 percent)), is largely explained by the concentration of MIH programs in those regions rather than by an independent regional effect. The concentration of substance use response activities among MIH-operating agencies reinforces the picture emerging across this chapter. Prehospital substance use care in Florida is primarily an extension of organized community health programming rather than a standalone clinical practice distributed broadly across the EMS system.

Among the 47 agencies operating an MIH/CP program, services concentrate on high-frequency utilizer support (87.2 percent) and home visits (83.0 percent), with substance use disorder services (63.8 percent), chronic disease management (59.6 percent), and post-hospital discharge follow-up (57.4 percent) also common (**Table 23**).

Table 23 *Mobile integrated healthcare and community paramedicine program characteristics, among agencies operating a program (Q50, Q51, Q52, Q53, Q56).*

Characteristic	Agencies (n)	Percent
Services delivered (Q50) (n = 47)		
High-frequency utilizer support	41	87.2%
Home visits	39	83.0%
Substance use disorder services	30	63.8%
Chronic disease management	28	59.6%
Post-hospital discharge follow-up	27	57.4%
Mental and behavioral health	22	46.8%
Other	5	10.6%
Alternative destination	4	8.5%
Vulnerable populations served (Q56) (n = 46)		
Older adults	36	78.3%
Chronic disease	34	73.9%
Low income	29	63.0%
Substance use disorder	29	63.0%

Characteristic	Agencies (n)	Percent
Rural	23	50.0%
Mental and behavioral health	22	47.8%
Homeless	21	45.7%
No specific focus	4	8.7%
Funding sources (Q51) (n = 45)		
Core agency budget	28	62.2%
Opioid settlement funds	23	51.1%
Grants	16	35.6%
County funds	11	24.4%
Other	7	15.6%
Fee for service	3	6.7%
Value-based payment	2	4.4%
Outcomes tracked (Q52) (n = 35)		
Patient outcomes	28	80.0%
Emergency department utilization	18	51.4%
Unscheduled EMS use	16	45.7%
Cost savings	12	34.3%
Patient satisfaction	12	34.3%
Hospital readmissions	7	20.0%
Data review frequency (Q53) (n = 46)		
Monthly	28	60.9%
Quarterly	11	23.9%
Never	4	8.7%
Annually	2	4.3%
Daily	1	2.2%

Source*: 2026 FL EMS Agency Survey. Base is the 47 agencies operating an MIH/CP program (Q42 = Yes). Service, population, funding, and outcome items are multiple-response and do not sum to 100. Item response varies; responding n is shown per section.*

Programs most often serve older adults (78.3 percent) and chronic disease patients (73.9 percent), followed by low-income and substance use disorder populations (63.0 percent each). Funding draws mainly on the core agency budget (62.2 percent) and opioid settlement funds (51.1 percent). Patient outcomes are the most tracked metric (80.0 percent), and most programs review their data monthly (60.9 percent), though 8.7 percent never review it.

Within the 47 MIH-operating agencies, program structure varies in ways consistent with the regional and geographic patterns identified earlier in this chapter. The Panhandle accounts for 16 of the 47 programs and shows a distinct funding profile: 75.0 percent draw on opioid settlement funds, against 37.9 percent of MIH agencies in all other regions combined (Fisher's

exact p = 0.029), and 93.8 percent rely on their core agency budget, against 44.8 percent elsewhere (p = 0.001). This dual reliance on both institutional and settlement funding suggests that Panhandle programs are more comprehensively resourced than their counterparts in other regions, likely reflecting the scale of the opioid burden that prompted their development. Rural MIH agencies similarly show a higher rate of opioid settlement funding than non-rural agencies (78.6 versus 38.7 percent; p = 0.023), and every rural-designated MIH agency explicitly identifies rural populations as a target group, a uniformity not seen among non-rural programs (100 versus 28.1 percent; p < 0.001). Service portfolio breadth is relatively consistent across the mid- to high-volume cohorts, with agencies in Cohorts 3 through 5 offering a median of five service types, suggesting that program scope does not scale with agency size once a minimum operational threshold is reached. Four agencies, all in Cohort 3, reported never reviewing program data, a gap that warrants attention given the broader tracking norms of the MIH community.

Integration with community partners is moderate and uneven (**Table 24).**

Table 24 *Integration with community healthcare entities and care coordination tools (Q55, Q54).*

Entity or tool	Agencies (n)	Percent
Integration rated Moderate or Full (Q55)		
Public health programs (n = 42)	29	69.0%
Hospital systems (n = 43)	29	67.4%
Social services (n = 42)	26	61.9%
Recovery oriented providers (n = 42)	25	59.5%
Mental health providers (n = 41)	20	48.8%
Federally qualified health centers (n = 40)	12	30.0%
Care coordination tools (Q54; n = 46)		
Direct communication	39	84.8%
PCR-based coordination	33	71.7%
Health information exchange	18	39.1%
Case conferences	15	32.6%
None	1	2.2%

Source: *2026 FL EMS Agency Survey. Q55 reports the share rating integration as Moderate or Full among agencies rating each entity (responding n shown). Q54 is multiple-response among agencies operating an MIH/CP program (n = 46).*

Among agencies rating each relationship, the strongest ties are with public health programs (69.0 percent moderate or full) and hospital systems (67.4 percent), followed by social services (61.9 percent) and recovery-oriented providers (59.5 percent); integration with federally qualified health centers is weakest (30.0 percent). Coordination relies on direct

communication (84.8 percent) and the patient care record (71.7 percent), with formal health information exchange (HIE) used by 39.1 percent.

Integration breadth, the number of partner types rated as moderate or full, does not vary significantly by agency size, organization type, or rural designation among MIH-operating agencies, with medians of three to four partner types across all subgroups. The consistently weakest integration point is federally qualified health centers (FQHC) at 30.0 percent, and this gap is no wider among rural agencies than non-rural ones, a finding that is counterintuitive given FQHCs' explicit mandate to serve rural and underserved communities. Federally Qualified Health Centers (FQHCs) operate under Section 330 of the Public Health Service Act, which requires them to serve medically underserved populations and to locate in areas with limited access to health care services, including rural and other underserved communities (Heisler, 2017). Whether this reflects limited FQHC presence in some service areas, operational barriers to EMS-FQHC coordination, or a lack of established referral pathways is not determinable from survey data and warrants direct examination. Coordination tools follow a similar pattern of no significant subgroup variation, with direct communication and PCR-based coordination dominant across agency types and HIE used by roughly two in five MIH agencies regardless of size or location.

Discussion

MIH is concentrated in a minority of EMS agencies, but where present it is typically structured around high-utilizer populations, post-discharge follow-up, and home-based care. This pattern is consistent with U.S. literature describing community paramedicine and MIH programs as targeted interventions designed to reduce emergency department utilization and hospital admissions among patients with complex needs or frequent 911 use (Gregg et al., 2019; Wanner & Burch, 2026). National surveys and program evaluations similarly indicate that high-utilizer identification and longitudinal care management are among the most common operational models, reflecting a system-level response to nonurgent EMS utilization and gaps in primary care access (Gregg et al., 2019).

The regional distribution of MIH programs in this dataset does not follow the resource gradient observed in other sections of the report. Instead, the Panhandle, characterized by smaller agencies, shows disproportionately high MIH adoption. This pattern is more consistent with need-driven implementation than with system capacity. U.S. literature describes MIH/CP as highly adaptive to local epidemiologic and access conditions, with program design varying based on community need, particularly in underserved or rural areas (Wanner & Burch, 2026). The concentration of programs in a high-opioid-burden region is

therefore consistent with national observations that MIH models are often deployed in response to unmet behavioral health, chronic disease, and access gaps rather than uniformly across well-resourced systems (Centers for Disease Control and Prevention, 2024b). The funding profile in the Panhandle, characterized by substantial reliance on opioid settlement funds, further reflects this alignment between public health burden and program implementation.

The SUD findings indicate that agencies more frequently engage in care coordination and medication-assisted treatment (MAT) than in alternative destination transport. This distribution is consistent with national evidence indicating that EMS-based MIH programs are more commonly oriented toward longitudinal care coordination and social determinant mitigation than toward transport disposition innovation (Centers for Disease Control and Prevention, 2024b; Gregg et al., 2019). Alternative destination models remain relatively limited in implementation despite policy interest. Federal evaluations of the CMS Emergency Triage, Treat, and Transport (ET3) model document operational and regulatory barriers to diversion pathways, including reimbursement constraints and implementation complexity (Centers for Medicare & Medicaid Services, 2025).At the same time, a substantial proportion of EMS encounters involve low-acuity conditions that could theoretically be managed outside the ED, indicating a persistent gap between system potential and operational reality (National Association of State EMS Officials (NASEMSO), 2020; Ward et al., 2024). Within this context, the higher prevalence of care coordination and MAT relative to destination redirection may reflect both structural constraints (limited destination availability, reimbursement policy) and operational feasibility.

The strong association between MIH program status and both MAT provision and care coordination suggests that SUD-related service delivery in the prehospital setting is largely embedded within broader community health programming rather than diffused across standard EMS operations. This is consistent with national evidence describing MIH/CP as a distinct service line requiring dedicated protocols, partnerships, and funding mechanisms, rather than a universally adopted clinical expansion (Wanner & Burch, 2026). The limited explanatory contribution of agency size, geography, or rural status after controlling for MIH presence further supports an interpretation that programmatic infrastructure, rather than baseline system characteristics, is the primary driver of SUD service integration.

Reliance on opioid settlement funding for a substantial share of programs introduces a structural sustainability constraint as that funding is predicted to end in 2039 or 2040, depending on the pace of disbursement (Florida Opioid Settlement, 2024). National MIH literature consistently identifies unstable and fragmented financing as a primary barrier to

program expansion and long-term viability, particularly given that traditional EMS reimbursement remains tied to transport-based payment models (National Association of Emergency Medical Technicians, 2023; Wanner & Burch, 2026). While recent Medicaid policy changes in some states are beginning to formalize reimbursement pathways for community paramedicine services, these mechanisms are not yet uniformly established (Wanner & Burch, 2026). The dual reliance observed in the Panhandle, combining settlement funds with core agency budgets, may indicate partial mitigation of this constraint, although the long-term durability of this model remains uncertain.

The weak linkage between EMS-based MIH programs and federally qualified health centers (FQHCs) represents a notable integration gap. National literature characterizes EMS as historically fragmented from the broader healthcare system, with persistent barriers to data sharing, care coordination, and institutional alignment (DeLia & Kutzin, 2009). Evidence from FQHC-focused studies indicates that even integration with hospitals and EDs, systems with more established relationships to EMS, varies widely and is often limited by communication infrastructure and organizational capacity (Timbie et al., 2019). The absence of stronger EMS–FQHC integration, including in rural areas, is therefore consistent with broader structural barriers rather than an isolated phenomenon. Potential explanations include misaligned funding streams, limited interoperability of health records, and substitution of hospital-based partnerships for primary care linkages. These mechanisms cannot be directly evaluated with the current survey data and warrant targeted measurement in future data collection.

Limitations

The program-characteristic items (Q49 through Q56) describe only the 47 agencies operating a program, a small base, and item response varies within it; those percentages should be read as describing that subgroup rather than all respondents. Subgroup analyses within the MIH-operating agencies — by region, rural designation, and cohort — rest on cell sizes as small as four to sixteen agencies and should be interpreted as descriptive patterns rather than statistically reliable estimates. The FQHC integration finding in particular is based on 14 rural MIH agencies rating that relationship and cannot support confident conclusions about rural-urban differences in FQHC coordination. The alternative-destination and substance use transport items were shown only to ground 9-1-1 responders. The integration ratings in Q55 are self-assessed perceptions rather than verified measures of coordination intensity or formality. Multiple-response items do not sum to 100. Q43 (program contact information) is excluded as personally identifiable information (PII).

The Discussion characterizes opioid settlement funding as time-limited, with disbursements projected to conclude in 2039 or 2040 depending on the pace of spending. The survey does not capture whether agencies have identified alternative funding sources to replace settlement revenue, so the sustainability risk is inferred from the funding structure rather than directly measured.

Chapter 7 | Public Information, Education, and Relations

BEMO Domain: Public health efforts and integration with County Health Departments

The Public Information, Education, and Relations chapter examines how agencies communicate with and serve their communities outside of emergency response, which constitutes the public health and prevention dimension of agency operations. It covers public information capacity, the use of customer input, participation in group-focused and pediatric-specific community risk reduction and injury prevention, naloxone leave-behind programs, and programs that promote EMS careers to youth. The structural predictors of adoption differ across these activities: public information capacity and pediatric prevention follow the size-and-fire pattern seen elsewhere in this report, while group-focused prevention is the one activity where rural agencies outperform non-rural agencies after adjustment. Customer input shows a reversed organizational-type pattern, with non-fire agencies significantly more likely to collect structured feedback. Naloxone leave-behind programs show the most geographically concentrated adoption of any activity in this chapter, with Central Florida and the Panhandle reporting rates three to five times higher than other regions, a pattern consistent with the opioid-driven MIH and SUD coordination concentration identified in Chapter 6. Most items in this module were answered by approximately 215 of the 230 responding agencies.

Results

Public information and community engagement are unevenly developed across agencies (**Table 25**).

Table 25 *Public information and community engagement activities (Q58, Q60, Q63, Q66, Q69).*

Activity	Agencies (n)	Percent
Maintains a public information officer (n = 215)	142	66.0%
Participates in group-focused community risk reduction (n = 215)	135	62.8%
Uses customer input such as satisfaction surveys (n = 227)	98	43.2%
Participates in pediatric-specific community risk reduction (n = 215)	89	41.4%
Operates a naloxone leave-behind program (n = 215)	63	29.3%

Source: *2026 FL EMS Agency Survey. Each row reports the share answering Yes; denominators are stated per row.*

Two-thirds of agencies maintain a public information officer (66.0 percent), and a majority participate in group-focused community risk reduction or injury prevention (62.8 percent). The use of customer input such as satisfaction surveys is less common (43.2 percent), as is pediatric-specific community risk reduction (41.4 percent). Naloxone leave-behind programs, which distribute naloxone to at-risk patients and contacts, are the least common activity (29.3 percent).

Among the 135 agencies with a group-focused program, programming concentrates on CPR and first aid (94.1 percent), followed by fall prevention (57.0 percent), drowning prevention (48.9 percent), motor vehicle safety (46.7 percent), and opioid and overdose prevention (43.0 percent) (**Table 26**).

Table 26 *Community risk reduction and youth EMS career program types (Q65, Q71).*

Program type	Agencies (n)	Percent
Group-focused community risk reduction (CRR) programs (Q65; n = 135)		
CPR and first aid	127	94.1%
Fall prevention	77	57.0%
Drowning prevention	66	48.9%
Motor vehicle safety	63	46.7%
Opioid and overdose prevention	58	43.0%
Other	11	8.1%
Youth EMS career programs (Q71; n = 101)		
Cadet programs	46	45.5%
High school academy	40	39.6%
Other	33	32.7%
Explorer programs	26	25.7%

Source*: 2026 FL EMS Agency Survey. Both items are multiple-response and do not sum to 100. Q65 is reported among the 135 agencies with a group-focused program (Q63 = Yes); Q71 among the 101 agencies reporting at least one youth career program.*

Youth EMS career programming, reported by 101 agencies, centers on cadet programs (45.5 percent) and high school academies (39.6 percent), with explorer programs less common (25.7 percent). Among the three structured program types, cadet programs are strongly associated with fire-based agencies (54.3 versus 10.0 percent of agencies with any youth program; Fisher's exact $p < 0.001$), while high school academy programs show no organizational-type difference (39.5 versus 40.0 percent; $p = 1.00$). The "other" category (32.7 percent) contains write-in responses that cluster into career and job fairs (10 agencies), school visits and community outreach (10), volunteer and scholarship programs (7), college and EMS school partnerships (6), fire-specific youth programs (4), and ride-along (3),

suggesting that informal career recruitment activity is common but not captured by the instrument's fixed response options.

Agencies not currently engaged in these activities expressed substantial interest in adopting them. Among those without each activity, 56.8 percent of agencies without a pediatric-specific program, 51.2 percent without customer input, and 48.8 percent without a group-focused program requested more information. Interest was lower for naloxone leave-behind programs, where 32.2 percent of non-participants sought more information.

The five community engagement activities vary in which agency characteristics predict adoption. A dedicated public information officer position is primarily a function of agency size, with adoption rising from 33 percent in Cohort 1 to 90 percent in Cohort 4, and volume cohort the dominant predictor after adjustment ($p < 0.001$). Pediatric-specific community risk reduction (CRR) follows a similar cohort gradient but adds a strong independent fire-status effect. Fire agencies adopt at nearly 50 percent versus 22 percent for non-fire agencies ($p = 0.001$ adjusted). This is consistent with fire departments' historically close relationship with child safety programming. Group-focused CRR is the only activity for which rural agencies show significantly higher adoption than non-rural agencies after controlling for size and fire status (71.4 versus 60.8 percent; $p = 0.023$), suggesting that rural agencies use group-based prevention to extend community health reach in settings with limited alternative resources.

Customer input through satisfaction surveys presents a reversed organizational-type pattern: non-fire agencies are significantly more likely to collect structured customer feedback than fire agencies (56.3 versus 36.4 percent; Fisher's exact $p = 0.006$, adjusted $p = 0.001$), an association that is independent of agency size and region. Rural agencies report substantially lower use of customer input (17.1 versus 48.6 percent; $p < 0.001$ unadjusted), though the difference attenuates after controlling for cohort and fire status ($p = 0.098$).

Naloxone leave-behind programs show the most distinctive geographic pattern of any activity in this chapter. **Central Florida (58.8 percent) and the Panhandle (52.9 percent) report adoption rates three to five times higher than the Southeast (16.1 percent) and Northeast (11.8 percent**), a regional effect that is highly significant after controlling for cohort, fire status, and rural designation (Central $p < 0.001$; Panhandle $p = 0.002$; Cramér's $V = 0.41$). Rural agencies are also more likely to offer naloxone leave-behind after adjustment ($p = 0.032$). Fire status, by contrast, is not a significant predictor (29.4 versus 30.0 percent; $p = 1.00$). This regional pattern parallels the concentration of MIH programs and SUD care coordination in the same regions identified in Chapter 6 and is consistent with a need-driven

response to disproportionate opioid burden rather than a general organizational capacity phenomenon.

Discussion

A majority of agencies maintain public information capacity and group-level prevention programming, but pediatric-specific prevention, structured customer feedback, and naloxone distribution lag behind. The high information-request rates among non-participants, exceeding half for pediatric prevention and customer input, indicate that limited adoption reflects gaps in knowledge or capacity rather than disinterest, which points to an opportunity for targeted technical assistance from the Department or regional coordinators. Naloxone leave-behind, the least adopted activity, also drew the least interest, a pattern that may reflect program cost, operational complexity, or perceived scope-of-practice barriers rather than a lack of community need. The concentration of community risk reduction in CPR and first aid suggests that prevention programming is often an extension of existing instructional capacity rather than a distinct public health function.

Limitations

The yes-or-no activity items were answered by approximately 215 agencies, and percentages are reported against those responding bases. Program-type items describe only agencies operating the relevant program: Q65 reflects the 135 agencies with a group-focused program, and the youth career mix reflects the 101 agencies reporting at least one such program. Because the youth career item carries no explicit "none" option, its prevalence among all respondents cannot be stated precisely. The information-request items were shown only to agencies not engaged in the corresponding activity, so they measure interest within that subgroup. The public information officer contact item (Q59) is excluded as PII, and the free-text method and program specifications in Q62 and Q67 are not tabulated.

The subgroup analyses testing adoption against volume cohort, fire status, region, and rural designation use the same joint logistic framework applied throughout the report. The reversed fire-status finding for customer input is an observational association; the survey does not capture the institutional or competitive factors that may explain why non-fire agencies are more likely to formalize customer feedback. The naloxone leave-behind regional pattern is interpreted alongside the MIH and SUD findings from Chapter 6, but the cross-chapter consistency of the regional cluster does not establish a causal mechanism. Common opioid burden is one plausible explanation but others, including shared access to technical assistance or grant funding streams, cannot be ruled out.

The youth career program item (Q71) carries a substantial "other" category (32.7 percent) whose write-in responses indicate that career fairs, school visits, and ride-along are common but unlisted activities. Future survey iterations should consider adding these as fixed response options to improve measurement precision and reduce reliance on free text.

Chapter 8 | EMS Data and Quality Improvement

BEMO Domains: Local data collection, quality improvement, and research

The EMS Data and QI chapter examines the infrastructure agencies use to collect data, measure performance, and improve care. It covers written quality assurance and improvement programs, electronic patient care reporting (ePCR) systems and satisfaction with them, participation in EMSTARS and the biospatial analytics platform, electronic data exchange with receiving facilities and the Florida HIE, data collaboration with county health departments, and the maturity of agency performance-metric practices. Data infrastructure adoption follows the volume-cohort gradient seen throughout this report, with biospatial, electronic exchange, and Florida HIE participation all climbing steeply from smaller to larger agencies. Electronic data exchange also varies significantly by region independent of size, with Central and Southwest agencies lagging Southeast agencies of equivalent volume. Self-reported performance metric maturity, by contrast, is flat across all cohorts, one of the few measures in this report that does not scale with agency size. Non-fire agencies outperform fire agencies on both HIE participation and performance-incentive use, extending the reversed organizational-type pattern first observed in Chapter 7. Most items were answered by approximately 222 to 228 of the 230 agencies; the collaborative-programs item was answered by 163.

Results

Formal QI is nearly universal (**Table 27**).

Table 27 *Quality improvement (QI) program, data systems, and data exchange (Q74, Q76, Q77, Q80, Q84, Q85, Q83).*

Item	Agencies (n)	Percent
Has a written QA/QI program (Q74; n = 227)	210	92.5%
Satisfied with ePCR system for QI (Q76; n = 227)	177	78.0%
Uses EMSTARS v3.5.1 (Q77; n = 222)	177	79.7%
Uses biospatial (Q80; n = 228)	139	61.0%
Exchanges electronic patient data with receiving facilities (Q84; n = 228)	155	68.0%
Participates in the Florida Health Information Exchange (Q85; n = 223)	88	39.5%
Participates in collaborative programs with county health department (Q83; n = 163)	38	23.3%

Source: *2026 FL EMS Agency Survey. Each row reports the share answering Yes (for Q76, satisfied with the ePCR system for QI, somewhat or extremely); denominators are stated per row. Q77 asked, as worded, "Does your agency use EMSTARS v.3.5.1?"*

EMSTARS v3.5.1 had not been implemented statewide during the field period, and most agencies were reporting under v3.5; see Limitations.

A written quality assurance and improvement program is in place at 92.5 percent of agencies, and 78.0 percent are satisfied with their ePCR system's support for QI. State data systems are widely used, with 79.7 percent responding Yes to the EMSTARS version item and 61.0 percent using biospatial. Electronic data exchange is more developed with receiving facilities (68.0 percent) than through the Florida HIE (39.5 percent), and formal data collaboration with county health departments is uncommon (23.3 percent).

The electronic patient care reporting market is concentrated (**Table 28**).

Table 28 *ePCR software vendors and biospatial usage (Q75, Q81).*

Vendor or usage	Agencies (n)	Percent
ePCR software vendor (Q75; n = 226)		
ESO	120	53.1%
ImageTrend	55	24.3%
Other	30	13.3%
ZOLL	20	8.8%
Fireworks	16	7.1%
FirstWatch	11	4.9%
Biospatial usage (Q81; n = 138)		
General situational awareness	111	80.4%
Quality improvement	74	53.6%
Scheduled reports	32	23.2%
Syndromic surveillance	32	23.2%
Other	7	5.1%

Source: *2026 FL EMS Agency Survey. Both items are multiple-response and do not sum to 100. Q75 responding n = 226; Q81 is reported among the 138 agencies using biospatial (Q80 = Yes).*

ESO serves 53.1 percent of agencies and ImageTrend 24.3 percent, with every other vendor below 10 percent. Among the 138 agencies using biospatial, the platform serves general situational awareness (80.4 percent) and QI (53.6 percent) most often, with scheduled reporting and syndromic surveillance each at 23.2 percent.

Self-reported performance-metric practices are broadly mature (**Table 29**).

Table 29 *Key performance metric practices (Q87).*

Statement applicable to agency performance metrics	Agencies (n)	Percent
Performance is transparent and shared with all employees	203	89.4%
Measurement is tied directly to training development	199	88.1%
Employees understand how their performance fits agency goals	196	86.3%
Measures track to strategies in the mission and vision	192	85.0%
Measurement is tracked between groups (e.g., shifts)	180	80.0%
Measurement is tracked by individual employee	172	76.4%
Incentives reinforce performance against the measures	140	61.9%

Source: *2026 FL EMS Agency Survey. Share of agencies for whom each statement is applicable to the key performance metrics used to measure and ensure quality. Responding n = 225 to 227 per statement.*

Most agencies affirm that performance is transparent and shared with employees (89.4 percent), tied directly to training development (88.1 percent), understood by employees in relation to agency goals (86.3 percent), and tracked to strategies in the mission and vision (85.0 percent). Tracking between groups and by individual employee is somewhat less common (80.0 percent and 76.4 percent), and the use of incentives to reinforce performance measures is the least adopted practice (61.9 percent).

As fielded, the EMSTARS item asked about version 3.5.1, for which Florida's EMS Data Dictionary was posted with an effective date of January 1, 2026 (Florida EMSTARS, 2026). Submissions had not yet moved to that version during the field period, and state records from the field-period window contain no v3.5.1 events (933,055 v3.5.0 and 67,106 v3.4.0 among 1,000,161 records from Florida agencies transporting Florida patients to Florida destinations). Responses are reported as given in the Survey: 79.7 percent of answering agencies responded Yes, and among the 45 answering No, 37.8 percent plan a transition, most on a timeline beyond the fourth quarter of 2026. The 2025 survey asked the same items but referring to EMSTARS version 3.5, permitting a follow-through comparison (**Table 30**).

Table 30 *2025 stated transition plans from EMSTARS v3.4 and observed submission version during the 2026 field period (February 25 to May 6, 2026), among the 51 agencies answering No to EMSTARS v3.5 use in 2025*

2025 response	Submitting only using v3.5	Submitting only using v3.4	No field-period submissions	Total
Planned transition, by Q3 2025	3	1	0	4
Planned transition, by Q4 2025	1	0	1	2
Planned transition, after Q4 2025	5	1	2	8
Planned transition, no timeline given	0	0	1	1
No planned transition	15	9	12	36
Total	**24**	**11**	**16**	**51**

***Source**: 2025 FL EMS Agency Survey linked by license number to EMSTARS submissions, February 25 to May 6, 2026. Agencies without field-period submissions are predominantly air, interfacility, or out-of-state carriers not captured in a Florida-agency, Florida-patient, Florida-destination pull. Four agencies reporting without license numbers were matched by name*

Of the 15 agencies that in 2025 planned a move off of v3.4, 9 of the 11 with field-period submissions in 2026 had completed it, as had 15 of the 24 linkable agencies that reported no plan. Eleven agencies continued to submit exclusively under v3.4. One agency completed its cutover during the field period itself, submitting v3.4.0 through March 2 and v3.5 thereafter. Four others show only trace v3.4 records (one to fifteen) within otherwise uniform v3.5 submission; consistent with late-syncing records rather than transitions.

Interest in technical assistance remained notable among non-participants in the other state systems, with 56.4 percent of agencies outside the Florida HIE requesting more information, against 34.8 percent of non-users of biospatial.

Data infrastructure adoption follows the cohort gradient observed across much of this report (**Figure 7).** Biospatial usage rises from 33 percent of Cohort 1 agencies to 90 percent of Cohort 5, and volume cohort is the dominant predictor after adjustment ($p < 0.001$). Electronic data exchange with receiving facilities, affirmative response to the EMSTARS version item, and Florida HIE participation all show similar cohort gradients (all $p < 0.03$ adjusted). Electronic data exchange also varies significantly by region independent of cohort: Central and Southwest agencies are substantially less likely to exchange data with receiving facilities than Southeast agencies of equivalent size (Central $p < 0.001$, Southwest $p = 0.001$), a

gap that may reflect differences in hospital-system infrastructure or connectivity rather than agency-level capacity.

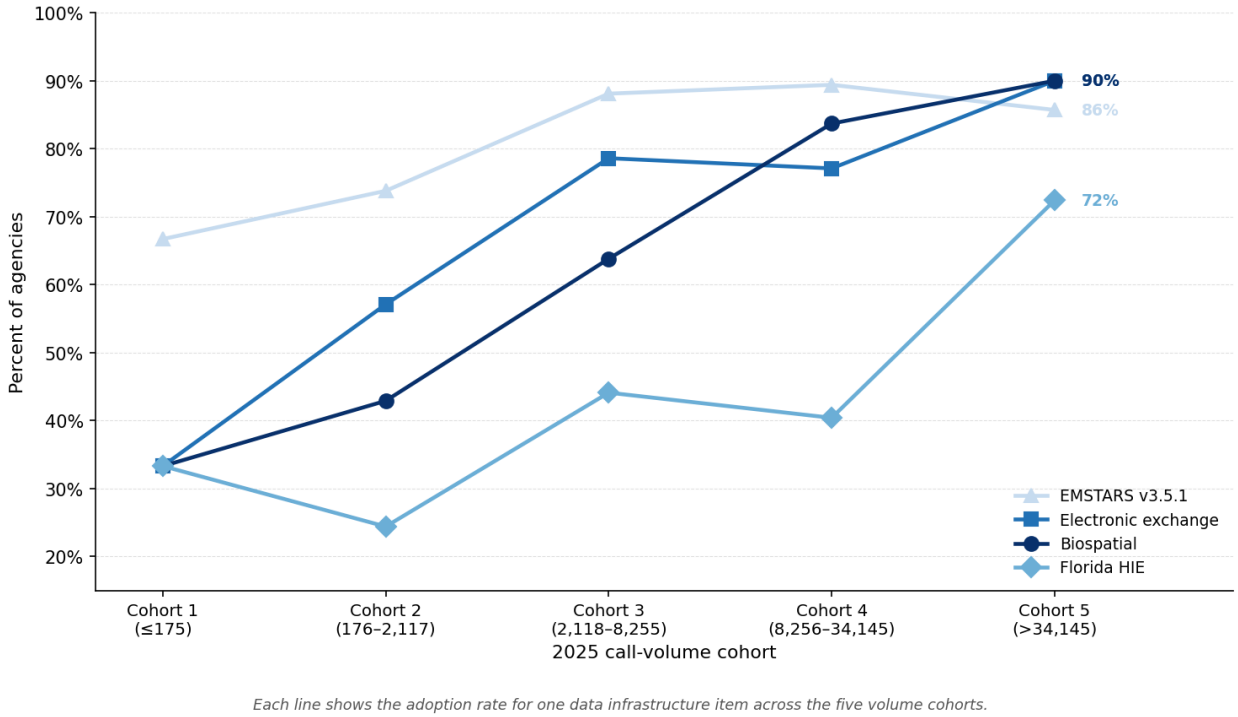

Figure 7 *Adoption of four state data infrastructure items by 2025 call-volume cohort, among responding agencies.*

Note: *EMSTARS version item (Q77) (n = 217), biospatial (n = 223), electronic data exchange with receiving facilities (n = 223), and Florida Health Information Exchange (n = 218). Volume cohort is a significant independent predictor of adoption for all four items in adjusted analysis (all p < 0.03). Lines connect cohort-level adoption rates to illustrate the gradient; the x-axis is ordinal.*

Responses to the Florida HIE item and performance-incentive use both show a reversed organizational-type pattern. Non-fire agencies are more likely than fire agencies to report participating in the Florida HIE after adjustment ($p = 0.018$) and more likely to reinforce performance metrics with incentives (75.7 versus 55.0 percent; $p = 0.032$ adjusted). The overall performance metric maturity score does not vary by cohort (Kruskal-Wallis $p = 0.63$), indicating that self-reported metric practices are broadly mature across agency sizes. Non-fire agencies report a modestly higher median score (7 versus 6 of 7 items; Mann-Whitney $p = 0.002$), driven primarily by the incentive differential.

Written QA/QI program adoption approaches but does not quite reach universal coverage (92.5 percent), with the gap concentrated in Cohort 2 agencies (82.9 percent versus 94 to 100 percent in all other cohorts; joint model p = 0.044). County health department data collaboration remains uniformly low across all subgroups (24 percent overall) with no clear structural predictor after adjustment.

Discussion

QI infrastructure appears broadly established across agencies, but national literature suggests that this apparent uniformity should be interpreted cautiously. While most EMS agencies report having QI processes, prior national survey data indicate substantial variation in implementation depth, staffing, and analytical capability across agencies (Lincoln et al., 2026). This is consistent with the observed absence of a cohort gradient in self-reported metric maturity: standardized reporting requirements and widespread use of structured data systems such as NEMSIS may produce surface-level uniformity in documentation practices even when underlying analytic capacity differs. NEMSIS has functioned as a national standard for EMS data collection and benchmarking, enabling agencies of varying size to participate in performance measurement and reporting (National Highway Traffic Safety Administration, 2025b). The flat distribution observed here may therefore reflect normalization of basic reporting functions rather than convergence in higher-order QI capability. A ceiling effect in the self-assessment instrument remains a plausible alternative explanation and cannot be excluded.

In contrast, the gradient observed in data connectivity aligns with national findings that interoperability remains uneven and resource-dependent. Larger organizations demonstrate higher participation in HIE and related data-sharing activities, whereas smaller and less-resourced systems face greater barriers to adoption and integration, including technical complexity, cost, and infrastructure limitations (Everson & Butler, 2020; Office of the National Coordinator for Health Information Technology, 2015). National EMS data initiatives indicate that, despite widespread adoption of ePCR, bidirectional data exchange with hospitals remains limited and technically challenging (National Emergency Medical Services Information System, 2024). Available national data suggest that only a small fraction of EMS records include linked hospital outcome data, reflecting persistent barriers to interoperability and feedback loops (Fox, 2025). These constraints are well documented in both federal and peer-reviewed literature, which describe EMS as historically under integrated with broader health information infrastructure (Gunderson et al., 2021). The strong volume gradient observed in this dataset is therefore consistent with structural constraints, including vendor capability, health system participation, and regional health IT infrastructure.

Review input from BEMO, however, complicates a direct reading of the Florida HIE item against this national pattern. All agencies' ePCR records are routed through the statewide exchange, operated through the Department's project with the Agency for Health Care Administration (AHCA), which returns hospital outcome information to agencies; record routing is therefore not agency-dependent, and participation in the statewide exchange does

not vary by agency type or size. What varies is whether linked outcome records come back, which depends principally on hospital participation in AHCA's program and on EMS data quality affecting record matching, and whether an agency additionally participates in a local or regional exchange, which is agency-, vendor-, and hospital-dependent. Some agencies also obtain hospital outcomes through their own hospital relationships, though that information does not necessarily appear in the records that reach the state. Against this architecture, the 39.5 percent affirmative rate, and its rise with agency size, is best read as variation in how agencies experience and understand the exchange, principally whether outcomes return to them, not in whether their records flow. The survey item did not distinguish the statewide from local exchanges.

The independent regional variation in electronic data exchange, after adjustment for agency size, further supports a structural interpretation. National evidence indicates that interoperability is shaped not only by agency-level adoption but also by the presence of regional or state-level health information networks and hospital participation in those systems. Variation between regions of similar agency size are therefore likely to reflect differences in hospital system integration, HIE maturity, and local data-sharing agreements rather than differences in EMS operational capacity alone. These findings are consistent with longstanding observations that EMS operates at the intersection of healthcare, public health, and public safety but is often incompletely integrated with each (Office of the National Coordinator for Health Information Technology, 2015).

Organizational differences between fire-based and non-fire agencies in reported HIE participation and performance-incentive use are also consistent with national patterns, although the evidence base is limited. Existing literature suggests that private and hospital-affiliated EMS providers may face stronger contractual or reimbursement-driven incentives to implement performance measurement and reporting systems, whereas fire-based agencies may operate under different governance and funding structures that do not prioritize the same metrics (National Highway Traffic Safety Administration, 2025b). Direct comparative evidence remains limited, and this interpretation should be considered provisional.

Formal data collaboration with county health departments (CHD) remains limited across all subgroups, which is consistent with national evidence describing fragmented integration between EMS and public health systems. Federal reports and interoperability initiatives note that EMS data are widely used for public health surveillance but are less consistently integrated into routine public health workflows or shared governance structures (National Highway Traffic Safety Administration, 2025b). Similarly, persistent barriers to EMS participation in HIEs, including technical complexity, cost, and lack of awareness, have been

identified as key limitations to broader system integration (Office of the National Coordinator for Health Information Technology, 2015). The high level of interest among agencies answering No to the HIE item (56.4 percent requesting more information) is consistent with an awareness gap. For many, records already flow through the statewide exchange without the agency recognizing it as participation.

The concentration of the ePCR vendor market has implications for interoperability that align with national experience. While standardized data frameworks such as NEMSIS improve consistency, variation in vendor implementation and data export practices remains a recognized barrier to seamless data exchange and system-level analytics (National Emergency Medical Services Information System, 2024). Vendor-dependent interoperability challenges are frequently cited in both federal and industry analyses as a limiting factor in achieving comprehensive EMS–hospital data integration.

Finally, the presence of agencies without a written QA/QI program warrants attention in the context of national expectations for EMS quality management. Although QI practices are widely recognized as fundamental to EMS system performance, national literature indicates that formalization and documentation of these programs remain inconsistent and vary considerably across agencies (Lincoln et al., 2026). The distinction between informal processes and formally documented QI systems is therefore a meaningful indicator of organizational maturity and regulatory compliance, even where minimum functional requirements may be met.

The EMSTARS version item also illustrates an instrument-design principle. An agency's submission version is directly observable in EMSTARS, and this cycle's verification showed self-report tracking it imperfectly in both directions. We recommend the EMSAC retire the version question in favor of direct lookup, reserving survey space for what only agencies can report: transition plans, timelines, and technical-assistance needs. The same applies to the HIE item, which should be split into what agencies can answer directly: whether linked hospital outcomes return into their ePCR system and whether they participate in a local or regional exchange.

Limitations

The QI, data system, and performance-metric items were answered by approximately 217 to 228 agencies; the county health department collaboration item (Q83) was answered by a smaller base of 163. Percentages are reported against item-specific responding bases stated in each table. ePCR satisfaction is collapsed from a four-point scale to a binary

satisfied/dissatisfied classification for subgroup analysis. The Q87 performance-metric items are self-assessed affirmations rather than independently verified measures of quality infrastructure maturity, and the uniformly high scores across all subgroups may reflect social desirability bias or acquiescence rather than genuinely equivalent practice. The reversed organizational-type findings for FL HIE participation and incentive use are observational associations; the survey does not capture the institutional, contractual, or competitive factors that may explain why non-fire agencies adopt these practices at higher rates. The regional gap in electronic data exchange is interpreted as a connectivity or infrastructure difference, but the survey does not measure hospital-system interoperability directly, and alternative explanations including vendor compatibility and regional data-sharing agreements cannot be ruled out.

The EMSTARS item (Q77) asked about version 3.5.1, to which no agency had transitioned during the field period; most agencies were reporting under version 3.5. Two observations indicate respondents interpreted the item inconsistently. The affirmative rate (79.7 percent) is nearly identical to the 2025 survey's rate for the same item worded for version 3.5, suggesting many agencies answered about current EMSTARS use generally, while 27 of the 30 No-answering agencies matched in state data were submitting exclusively under v3.5.0, indicating others answered the version literally. The **Table 27** figure should therefore be read as a self-report of the item as asked, not as a measure of version status, and it likely understates EMSTARS participation overall, which approaches nine in ten responding agencies by direct linkage. The transition items (Q78 and Q79) are read as intentions regarding version 3.5.1. The version reference will be corrected on the 2027 instrument.

Chapter 9 | Telecommunications

BEMO Domain: Telecommunications

The Telecommunications chapter examines the dispatch functions that support the prehospital response, focusing on clinical dispatch practices, dispatch-assisted CPR data capture, and the dispatcher workforce. It covers whether dispatch centers provide telecommunicator-CPR (T-CPR) and stroke screening, the tenure profile of dispatch staff, the use of exit interviews, and the reasons staff leave. Fire-based agencies report clinical dispatch practices at roughly double the rate of non-fire agencies, likely reflecting the structural advantage of operating or directly influencing their own dispatch centers. Stroke screening shows an additional independent rural gap that persists after controlling for agency size and organizational type. On the workforce side, the dispatcher tenure profile is bimodal with a hollow middle consistent with high early-career attrition, and the reasons behind separations vary by organizational type, region, and rural designation in ways that identify where the retention challenge is most acute. The dispatch-practice items were answered by the approximately 176 of 230 respondents operating or affiliated with a dispatch center. Two items on state reporting of dispatch CPR data (Q91 and Q92) returned no usable data because of an instrument display-logic defect and are not reported.

Results

Most dispatch centers deliver telecommunicator or dispatch-assisted CPR instructions (77.3 percent), while fewer capture data on those interventions (63.6 percent) (**Table 31**).

Table 31 *Dispatch center CPR practices and workforce monitoring (Q89, Q90, Q95).*

Item	Agencies (n)	Percent
Dispatch center provides T-CPR or DA-CPR instructions (n = 176)	136	77.3%
Dispatch center captures DA-CPR/T-CPR data (n = 176)	112	63.6%
Conducts exit interviews with departing dispatch staff (n = 192)	134	69.8%

Source: *2026 FL EMS Agency Survey. Each row reports the share answering Yes; denominators are stated per row. Q91 and Q92 (state reporting status and method for DA-CPR/T-CPR) returned no data owing to an instrument display-logic defect and are not reported.*

The two clinical dispatch practices, dispatch-assisted CPR and stroke screening, are strongly associated with fire-based agency status. Fire agencies report dispatch-assisted CPR at 85.9 percent versus 43.8 percent for non-fire agencies, and stroke screening at 71.1 versus 34.4

percent (both $p < 0.003$ adjusted), likely reflecting the greater likelihood that fire departments operate or directly influence their own dispatch centers. Volume cohort is also significant for both items (both $p < 0.04$ adjusted), with Cohort 5 agencies reporting near-universal adoption. Stroke screening shows an additional independent rural gap: rural agencies report dispatch-level stroke screening at 38.9 percent versus 71.0 percent for non-rural agencies (adjusted $p = 0.003$), a difference that persists after controlling for cohort and fire status and suggests that rural dispatch centers face barriers to implementing structured screening tools beyond what agency size or organizational type explains. On the workforce side, about seven in ten agencies conduct exit interviews with departing dispatch staff (69.8 percent).

The dispatcher workforce shows a bimodal tenure profile (**Table 32**).

Table 32 *Dispatch center staff by tenure (Q93).*

Tenure band	Staff (n)	Share of reported staff
Less than 2 years	652	22.2%
2 to 5 years	734	25.0%
5 to 7 years	226	7.7%
7 to 10 years	315	10.7%
10 to 15 years	276	9.4%
15 years or more	728	24.8%
Total reported staff	2931	100.0%

Source: *2026 FL EMS Agency Survey. Aggregate staff counts across the 96 agencies reporting any tenure data (2,931 staff). Per-band reporting varies from 56 to 88 agencies; shares are of the reported total.*

Among the 96 agencies reporting tenure, nearly half of dispatch staff have fewer than five years of service (47.2 percent, comprising 22.2 percent under two years and 25.0 percent at two to five years), while another quarter have 15 years or more (24.8 percent). The middle bands are comparatively thin, with only 27.8 percent at five to 15 years. A large early-career cohort alongside a stable veteran core, with a hollow middle, is consistent with high early-career attrition.

Separations are dominated by departures other than retirement. Across reporting agencies, non-retirement separations outnumbered retirements roughly six to one (885 against 136). The reasons cited most often (**Table 33**) were career change (48.7 percent of the 113 agencies reporting reasons) and low pay or compensation (38.9 percent), followed by schedule and retirement (27.4 percent each) and burnout (20.4 percent).

Table 33 *Reasons for dispatch staff separation (Q96).*

Reason	Agencies (n)	Percent
Career change	55	48.7%
Low pay or compensation	44	38.9%
Other	32	28.3%
Retirement	31	27.4%
Schedule	31	27.4%
Burnout	23	20.4%
Leadership	10	8.8%
Workplace culture	6	5.3%

Source: *2026 FL EMS Agency Survey. Multiple-response; percentages are of the 113 agencies reporting separation reasons and do not sum to 100.*

A reliable turnover rate cannot be computed, because 12 agencies reported more separations than current staff, indicating inconsistent interpretation of the staffing and separation items.

Discussion

The chapter's central finding for telecommunicator CPR (T-CPR) identifies a visibility gap layered onto otherwise substantial adoption. Nationally, T-CPR is regarded as a core component of the cardiac arrest chain of survival and is strongly recommended across U.S. EMS systems (Kurz et al., 2020). Florida's reported provision rate (77.3 percent) is consistent with the expectation that most U.S. public safety answering points (PSAPs) have implemented dispatcher-assisted CPR protocols. However, the observed gap between provision and data capture reflects a known limitation in national systems: while T-CPR implementation is widespread, systematic measurement of performance and outcomes remains inconsistent and often relies on local or registry-based initiatives rather than universal reporting standards (Gunderson et al., 2021). The absence of reporting-status data due to instrument error compounds this limitation and places Florida below emerging national benchmarks that emphasize continuous QI through structured measurement of T-CPR intervals and outcomes.

The organizational-type divide observed in dispatch-assisted CPR and stroke screening aligns with structural patterns documented in U.S. EMS systems. Fire-based agencies report substantially higher engagement in clinical dispatch practices, which is consistent with the integration advantages associated with collocated or agency-controlled dispatch operations. National literature describes EMS as variably integrated with dispatch and broader health system infrastructure, with governance and organizational structure influencing the extent to which clinical protocols can be implemented and monitored (Office of the National

Coordinator for Health Information Technology, 2015). In contrast, agencies dependent on secondary or third-party dispatch centers may have limited authority over protocol adoption and quality assurance, which represents an operational, not clinical, constraint.

Stroke recognition at dispatch in Florida shows both an organizational and rural disparity that is consistent with national evidence. A systematic review of dispatcher stroke recognition found wide variability in diagnostic sensitivity, ranging from approximately 18 percent to 83 percent across studies, indicating that even where protocols exist, performance is inconsistent (Wenstrup et al., 2024). Additional U.S.-based evidence demonstrates that prehospital stroke processes vary by geographic context, with rural systems exhibiting lower adherence to best practices such as stroke prenotification and related time-sensitive interventions (Shams et al., 2023). The rural gap observed in Florida dispatch stroke screening is therefore consistent with broader national patterns linking resource limitations, training capacity, and call volume to reduced implementation of specialized clinical protocols.

The telecommunicator workforce findings closely mirror national workforce data. The bimodal tenure distribution and concentration of separations among early-career staff are consistent with a national workforce characterized by high turnover, staffing shortages, and retention challenges. A nationwide survey of 9-1-1 centers reported an average vacancy rate of approximately 25 percent and identified compensation, schedule demands, and job stress as primary drivers of attrition (International Academies of Emergency Dispatch & National Association of State 911 Administrators, 2023). These drivers do not appear to be unique to Florida and affect PSAPs across all regions and agency types. The higher rates of separation tied to low pay and career change in non-fire dispatch environments align with these national findings and reflect structural differences in compensation and benefit systems between municipal fire-based models and standalone or contracted dispatch organizations.

The rural workforce pattern observed in Florida, a higher proportions of early-career staff and higher separation rates, is also consistent with national EMS and dispatch workforce evidence (International Academies of Emergency Dispatch & National Association of State 911 Administrators, 2023). Federal analyses indicate that rural emergency response systems operate with fewer resources, lower staffing stability, and greater reliance on part-time or less experienced personnel, contributing to variability in performance and capability (Centers for Disease Control and Prevention, 2024a). This structural constraint likely interacts with the observed lower adoption of clinical dispatch tools, as implementation and maintenance of protocols such as stroke screening and T-CPR quality monitoring depend on experienced personnel and sustained training infrastructure.

Regional variation in reported low pay as a separation driver introduces an additional layer that is less well documented in national literature. While compensation is a widely recognized factor in telecommunicator retention, comparative regional analyses remain limited. National reports consistently identify wages, workload, and scheduling as primary contributors to turnover but do not provide detailed geographic stratification beyond broad national patterns (International Academies of Emergency Dispatch & National Association of State 911 Administrators, 2023). The regional disparities observed within Florida therefore represent an internal variation that cannot be directly benchmarked against national data and may reflect localized labor market dynamics.

Finally, the widespread use of exit interviews suggests the presence of feedback mechanisms that are consistent with national efforts to address 9-1-1 workforce instability. However, national literature emphasizes that data collection alone is insufficient without structured application to recruitment, retention, and workforce planning strategies (International Academies of Emergency Dispatch & National Association of State 911 Administrators, 2023). The data-quality limitations identified in reported staffing and separation counts are also consistent with broader challenges in EMS and 911 workforce measurement, where inconsistent definitions and reporting practices complicate interpretation and comparison across systems.

Limitations

The dispatch-practice items were answered by 176 agencies and describe that subset. The tenure profile aggregates counts across 96 agencies with variable per-band reporting (56 to 88 agencies), so it is a snapshot of reported staff rather than a complete census. The separation counts and reasons are self-reported, and 12 agencies reported more 12-month separations than current dispatch staff, a logical inconsistency; these records are identified in the quality control log with their values retained, and no dispatcher turnover rate is computed. Q91 and Q92 were not collected. The PSAP representative contact item (Q88) is excluded as PII.

The subgroup analyses of clinical dispatch practices assume that the responding EMS agency's characteristics (i.e., fire status, volume cohort, region, and rural designation) apply to its affiliated dispatch center, which is not necessarily the case. Non-fire agencies in particular may be served by third-party dispatch centers whose characteristics, staffing, and protocols differ from those of the EMS agency responding to the survey. The fire-status finding should therefore be interpreted as reflecting a structural association between agency type and dispatch governance rather than a direct measure of dispatch center capability.

Similarly, the regional attribution of dispatch workforce characteristics assumes that the dispatch center operates in the same BEMO region as the responding agency, an assumption that holds for most fire-based centers but may not hold for agencies served by regional or multi-county dispatch operations.

The regional variation in low pay as a separation reason (chi-square $p = 0.004$) is a strong statistical signal but rests on a base of 108 agencies reporting separation reasons, with per-region cell sizes ranging from 15 to 27. The finding identifies a pattern worth monitoring but cannot support precise regional estimates of dispatch compensation adequacy.

Chapter 10 | Disaster Preparedness

BEMO Domain: Disaster and mass casualty preparedness and response

The Disaster Preparedness chapter examines agency readiness for mass casualty incidents and other high-consequence events. It covers participation in health care coalitions, active assailant response including protocols, ballistic protection, warm zone policies, and entry and extraction teams, hemorrhage control protocols, kits, and community training, care for highly infectious disease patients, disaster agreements with county health departments, and use of the FirstNet public safety network. Readiness varies sharply across the four areas. Active assailant and tactical capabilities are widespread but strongly stratified by fire status, with fire agencies reporting adoption at roughly double the rate of non-fire agencies on ballistic protection and entry teams. Hemorrhage control protocols and kits are near-universal and structurally invariant, but community Stop the Bleed training shows a significant regional gap, with the Northeast at less than half the Southeast's rate independent of agency size. Infectious disease preparedness is the most uniform finding in the chapter, with no variation by any structural predictor. Coordination and communications structures are the weakest area and the most cohort-dependent, with coalition and FirstNet participation climbing steeply from the smallest to the largest agencies. Most readiness items were answered by approximately 180 to 225 of the 230 agencies.

Results

Core mass casualty readiness is high (**Table 34**).

Table 34 *Disaster and mass casualty preparedness capabilities (Q98, Q101, Q102, Q105 to Q109, Q113 to Q116).*

Capability	Agencies (n)	Percent
Active assailant and tactical response		
Active assailant protocol adopted with training (n = 187)	164	87.7%
Policies for entering warm zones (n = 186)	157	84.4%
Provides ballistic protection for responders (n = 187)	130	69.5%
Designated entry and extraction teams (n = 181)	94	51.9%
Hemorrhage control		
Written hemorrhage control protocols for MCIs (n = 186)	165	88.7%
Specialized hemorrhage control kits (n = 186)	154	82.8%
Community hemorrhage control (Stop the Bleed) training (n = 185)	112	60.5%
Highly infectious disease		
Provided training to care for infectious disease patients (n = 180)	164	91.1%
Adopted protocol to care for infectious disease patients (n = 225)	181	80.4%
Coordination and communications		
Participates in a health care coalition (n = 223)	113	50.7%
Uses FirstNet for voice and data (n = 224)	110	49.1%
Written disaster agreement with county health department (n = 178)	56	31.5%

Source: *2026 FL EMS Agency Survey. Each row reports the share answering Yes; denominators are stated per row.*

Active assailant and tactical response capabilities are widespread but stratified by organizational type. An active assailant protocol with training is in place at 88.1 percent of agencies, warm zone entry policies at 85.3 percent, ballistic protection at 70.3 percent, and designated entry and extraction teams at 52.2 percent. Active assailant and tactical response capabilities are widespread but stratified by organizational type (**Figure 8**). Fire-based agencies report significantly higher adoption than non-fire agencies on all four items, with the largest gap on ballistic protection (80.9 versus 21.2 percent; adjusted $p < 0.001$) and designated entry and extraction teams (58.9 versus 17.2 percent; adjusted $p < 0.001$). Volume cohort is a significant independent predictor for protocol adoption and entry teams (both adjusted $p < 0.001$), with Cohort 5 agencies reporting near-universal adoption across all four capabilities. Rural agencies show lower unadjusted rates on each item, but these differences attenuate after controlling for cohort and fire status, indicating that the rural gap in tactical response reflects the composition of rural agencies rather than an independent rural effect.

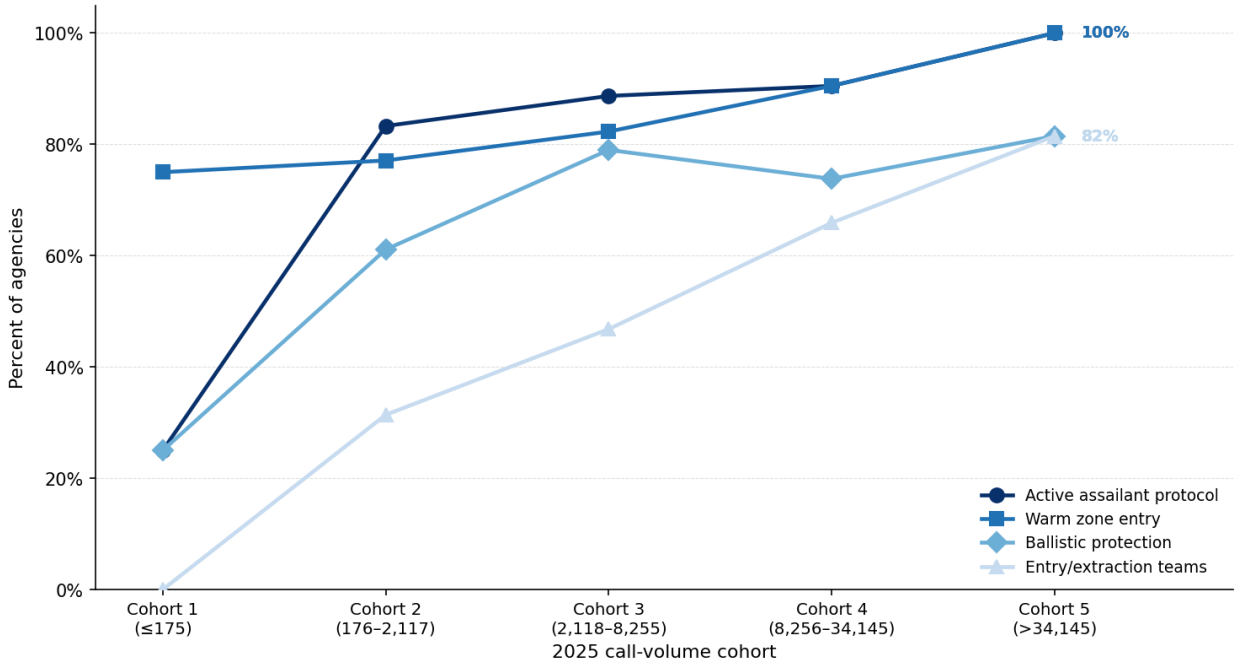

Figure 8 *Adoption of four active assailant and tactical response capabilities by 2025 call-volume cohort.*

Note: *Active assailant protocol with training (n = 185), warm zone entry policies (n = 184), ballistic protection (n = 185), and designated entry and extraction teams (n = 180). Volume cohort is a significant independent predictor for protocol adoption and entry/extraction teams (both adjusted p < 0.001). Lines connect cohort-level adoption rates; the x-axis is ordinal. Cohort 1 values (n = 4) should be interpreted cautiously.*

Hemorrhage control readiness is high and remarkably uniform. Written hemorrhage control protocols for mass casualty incidents (88.7 percent) and specialized hemorrhage control kits (82.8 percent) do not vary significantly by volume cohort, fire status, region, or rural designation. Community hemorrhage control training (Stop the Bleed), at 60.5 percent, is the exception. Adoption rises with agency volume (0 percent in Cohort 1 to 69.2 percent in Cohort 5; adjusted p = 0.003), and the Northeast reports substantially lower community training rates than the Southeast (40.9 versus 77.3 percent; adjusted p < 0.001), with Central also lower (53.1 percent; adjusted p = 0.013). Fire status and rural designation do not predict community training adoption after adjustment. The Northeast gap is not explained by population size or agency volume. The regional distribution of community hemorrhage control training is shown in **Figure 9**. The Northeast handles the highest total call volume of any BEMO region, indicating a genuine regional difference in community training engagement rather than a compositional artifact.

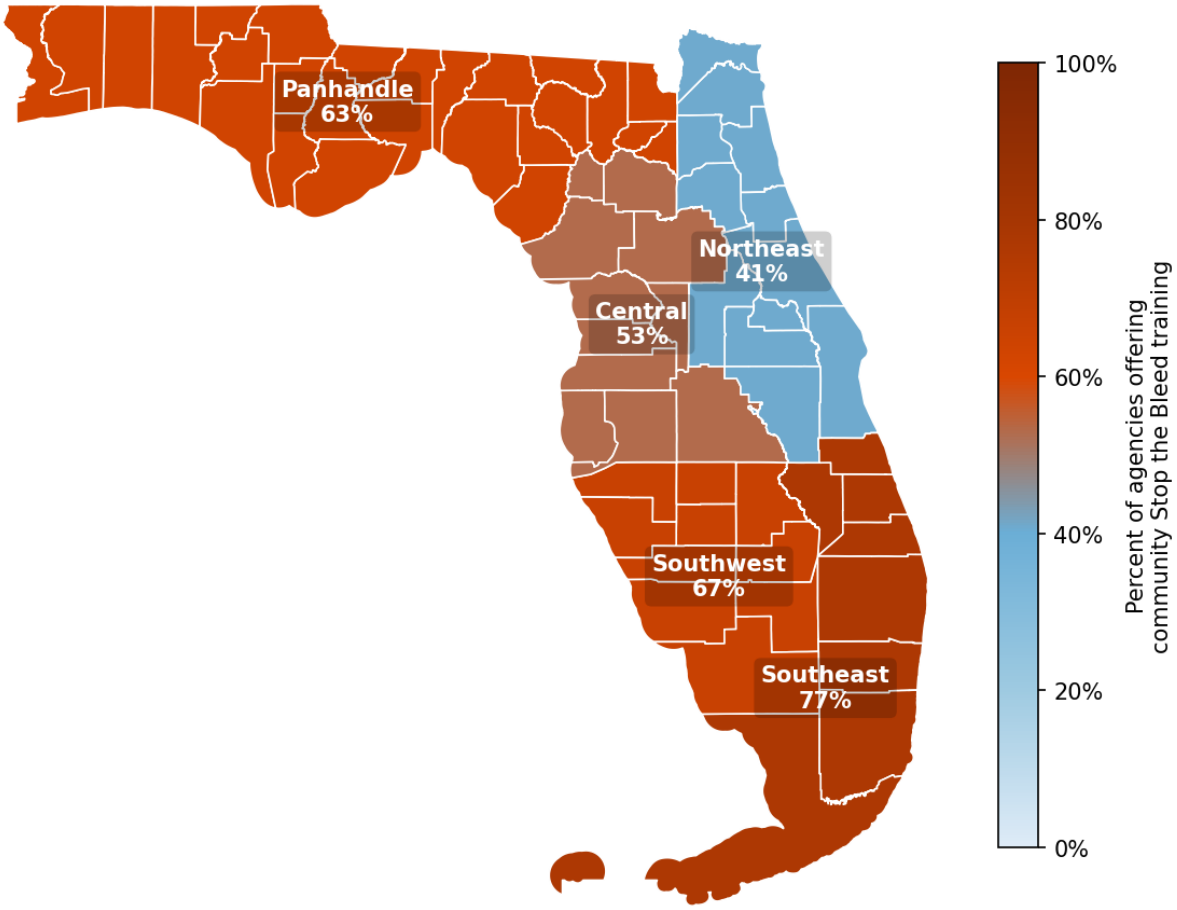

Figure 9 *Community hemorrhage control (Stop the Bleed) training adoption by BEMO region, among responding agencies (n = 183).*

Note: *Shading reflects the percentage of agencies within each region offering community training. The Northeast's lower adoption rate (40.9 percent) persists after controlling for volume cohort, fire status, and rural designation (adjusted p < 0.001) and is not explained by differences in agency volume or population served.*

Infectious disease preparedness is the most uniform area in this chapter. Staff training for infectious disease patients (91.1 percent) and adopted protocols (80.4 percent) show no significant variation by volume cohort, fire status, region, or rural designation. This uniformity likely reflects the sustained investment in infectious disease preparedness following the COVID-19 pandemic, which produced a system-wide floor in both training and protocol adoption that persists regardless of agency characteristics.

Coordination and communications structures are the weakest area and the most cohort-dependent (**Figure 10**). Health care coalition participation rises from 16.7 percent of Cohort 1 agencies to 80.0 percent of Cohort 5 (adjusted p < 0.001), and FirstNet adoption follows a

similar gradient (16.7 to 73.3 percent; adjusted p < 0.001). The Northeast reports significantly lower coalition participation than the Southeast after controlling for cohort (adjusted p = 0.005), and Central and Panhandle agencies are less likely to use FirstNet (adjusted p = 0.011 and 0.025). Written disaster agreements with county health departments remain the lowest-adopted item at 31.5 percent, with no significant cohort gradient and a borderline reversed fire-status pattern in which non-fire agencies trend toward higher adoption (48.3 versus 28.4 percent; adjusted p = 0.051), consistent with the non-fire advantage on HIE participation and customer input observed in earlier chapters.

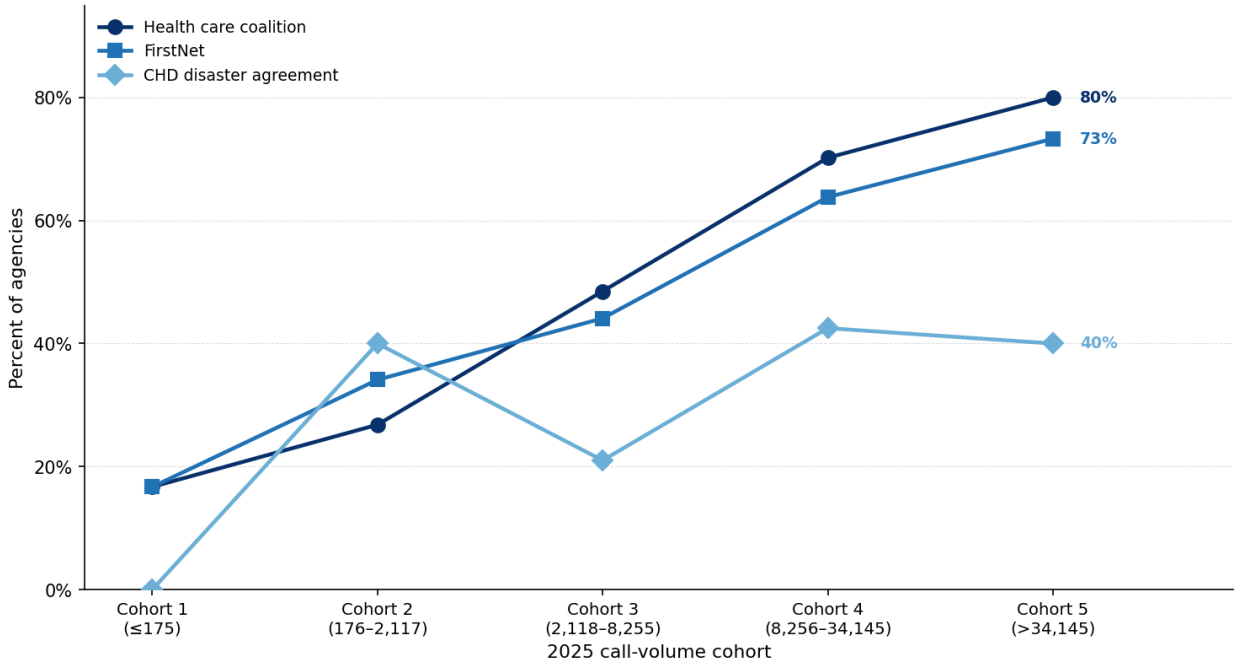

Figure 10 *Adoption of three coordination and communications capabilities by 2025 call-volume cohort.*

Note: *Health care coalition participation (n = 223), FirstNet use (n = 224), and written disaster agreement with county health department (n = 178). Volume cohort is a significant independent predictor for coalition and FirstNet adoption (both adjusted p < 0.001) but not for CHD disaster agreements (p = 0.49). Lines connect cohort-level adoption rates; the x-axis is ordinal. Cohort 1 values (n = 4–6) should be interpreted cautiously.*

Coordination structures are the weakest area. Only half of agencies participate in a health care coalition (50.7 percent) or use FirstNet (49.1 percent), and fewer than a third have a written disaster agreement with their county health department (31.5 percent). Cost dominates the barriers to community hemorrhage control training (**Table 35**).

Table 35 *Barriers to community hemorrhage control training (Q111, Q112).*

Barrier	Agencies (n)	Percent
Barriers to offering training (n = 71)		
Staff time or instructor cost	46	64.8%
Kit cost	37	52.1%
Materials cost	31	43.7%
Insufficient community demand	24	33.8%
Other	5	7.0%
Not mandated	4	5.6%
Lack of government support	4	5.6%
Barriers to expanding training (n = 101)		
Kit cost	46	45.5%
Staff time or instructor cost	39	38.6%
Materials cost	33	32.7%
Insufficient community demand	31	30.7%
Other	17	16.8%
Not mandated	8	7.9%
Lack of government support	1	1.0%

Source*: 2026 FL EMS Agency Survey. Multiple-response and do not sum to 100. Q111 (barriers to offering) was shown to agencies not currently offering training (n = 71); Q112 (barriers to expanding) to agencies that offer it (n = 101).*

Among agencies not offering it, staff or instructor time (64.8 percent) and kit cost (52.1 percent) lead; among those that offer it, kit cost (45.5 percent) is the main constraint on expansion. Insufficient community demand was cited by about a third in both groups, and the mandate and government-support barriers were minor.

Discussion

Florida agencies are well prepared for the clinical dimensions of mass casualty response, and this pattern is consistent with national preparedness trends. U.S. EMS preparedness literature indicates that protocols and training for active assailant events, hemorrhage control, and infectious disease are widely disseminated following national initiatives such as the Hartford Consensus and Stop the Bleed campaign, which explicitly promote hemorrhage control training across EMS, law enforcement, and the public (Jacobs & Joint Committee to Create a National Policy to Enhance Survivability from Intentional Mass-Casualty Active Shooter Events, 2015; Moore, 2017). These initiatives have been broadly adopted across U.S. emergency response systems and have established a national baseline for trauma-specific mass casualty competencies. The level of clinical preparedness observed in Florida appears consistent with this national framework rather than exceptional.

The organizational divide in tactical capability between fire-based and non-fire agencies reflects structural patterns present in U.S. EMS systems, although direct quantitative comparisons are limited. National doctrine emphasizes integrated operations between EMS, fire, and law enforcement, particularly through Rescue Task Force and Tactical Emergency Casualty Care models, but implementation depends on local governance and resource alignment (National Association of Emergency Medical Technicians, 2017). Fire-based agencies are more likely to participate directly in these integrated operational models due to co-location, shared command structures, and access to fire service funding streams, whereas non-fire agencies often operate as separate entities or contractors within local systems (National Association of Emergency Medical Technicians, 2017; National Association of State EMS Officials (NASEMSO), 2020). The disparity observed in Florida therefore appears consistent with a structural distinction, agency ownership of capability, rather than a purely operational gap in community response capacity.

The absence of an independent rural effect after adjustment is also consistent with national literature, which indicates that rural disparities in EMS preparedness are often mediated through structural characteristics such as agency size, funding, and organizational model rather than geography alone (National Association of Emergency Medical Technicians, 2017). In this context, the Florida findings suggest that rural differences in tactical readiness reflect system composition rather than an inherent rural limitation once organizational factors are accounted for.

Infectious disease preparedness represents the most uniform domain, which aligns with national experience following the COVID-19 pandemic. Federal preparedness efforts, including the Hospital Preparedness Program and pandemic response initiatives, established system-wide requirements for infectious disease protocols, personal protective equipment, and training across EMS and healthcare systems (Office of the Assistant Secretary for Preparedness and Response & U.S. Department of Health & Human Services, 2025). The uniformity observed in Florida is therefore consistent with a nationally imposed baseline rather than locally differentiated performance. Whether this uniformity persists as federal funding and pandemic-era urgency decline remains uncertain and is an identified concern in national preparedness evaluations (Barnett et al., 2022).

The gaps in community-facing hemorrhage control training are more difficult to benchmark against national data, as no comprehensive national adoption metric exists. However, available literature indicates that Stop the Bleed dissemination depends heavily on local champions, institutional sponsorship, and grant funding, leading to uneven geographic implementation despite strong national endorsement (Pellegrino et al., 2023). The regional

variation observed in Florida is consistent with this decentralized implementation model and appears to reflect variation in program delivery infrastructure rather than differences in clinical capacity or demand.

The coordination gap identified in coalition participation and FirstNet adoption aligns closely with national findings that interorganizational integration is uneven and resource-dependent. Healthcare coalitions, established under the Hospital Preparedness Program, are a central mechanism for coordinating EMS, hospitals, and public health during disasters; however, their effectiveness and participation levels vary substantially across jurisdictions despite sustained federal funding (Barnett et al., 2022; Office of the Assistant Secretary for Preparedness and Response & U.S. Department of Health & Human Services, 2025). National analyses following COVID-19 highlighted persistent fragmentation in coordination despite the presence of coalition structures, indicating that formal participation does not uniformly translate to operational integration (Barnett et al., 2022). The strong size gradient observed in Florida is therefore consistent with national patterns in which larger and better-resourced organizations are more likely to participate in and benefit from coalition infrastructure.

Similarly, adoption of FirstNet reflects a national trend toward expanding but uneven uptake of public safety broadband. The FirstNet network has achieved broad national reach, supporting tens of thousands of public safety agencies and millions of connections, but participation remains voluntary and varies based on agency resources, operational priorities, and local implementation (First Responder Network Authority & U.S. Department of Commerce, 2024). The Florida pattern, higher adoption among larger agencies and regional variation independent of size, appears consistent with this national adoption model and suggests that connectivity is influenced by both resource capacity and regional infrastructure.

Finally, the low rate of formal disaster agreements with county health departments (CHD) reflects a broader national pattern of incomplete integration between EMS and public health systems. Federal preparedness frameworks explicitly identify coordination between EMS, public health, and healthcare coalitions as essential to effective disaster response, yet national evaluations continue to document gaps in formalized partnerships and shared planning structures (Office of the Assistant Secretary for Preparedness and Response & U.S. Department of Health & Human Services, 2025). The absence of a strong cohort gradient suggests that this gap is systemic rather than resource-dependent, and may reflect institutional boundaries, funding silos, or differing governance structures between EMS and public health agencies. The observed trend toward greater adoption among non-fire agencies

is consistent with patterns in other chapters and may reflect differences in institutional alignment rather than differences in preparedness capability.

Limitations

Item response varied across this module. The tactical, hemorrhage control, and coordination items were answered by approximately 178 to 187 agencies, while the coalition, infectious disease protocol, and FirstNet items reached 223 to 225. The community participant count aggregates self-reported estimates from 88 agencies and is sensitive to a few large programs. Barrier items were shown only to the relevant subgroup, agencies offering or not offering training. The disaster point of contact (Q97) is excluded as PII.

Subgroup analyses across this chapter use the same joint logistic framework applied throughout the report, with volume cohort, fire status, region, and rural designation as predictors. Cohort 1 contains four to six agencies depending on the item and cannot support reliable subgroup estimates; values for that cohort are reported but should be interpreted cautiously. The fire-status dominance in tactical response items likely reflects the structural integration of fire-based agencies with their dispatch and tactical operations rather than a direct measure of clinical capability, and non-fire agencies served by fire department tactical teams may have access to capabilities not captured by this survey. The Northeast community hemorrhage control gap is a significant adjusted finding ($p < 0.001$) that is not explained by agency volume, fire status, or rural designation; the survey does not capture the regional training infrastructure, trauma coalition activity, or hospital system partnerships that may explain this variation.

Chapter 11 | EMS for Children

BEMO Domain: Pediatric events

The EMS for Children chapter examines pediatric and neonatal emergency care readiness in four dimensions: the administrative supports that agencies provide for pediatric care, the clinical tools they use, the barriers to establishing a coordinating role, and participation in infant mortality reduction programs. Pediatric transport is near-universal and clinical tools are well standardized, but the PECC role, identified nationally as one of the strongest drivers of pediatric readiness, is designated by fewer than a third of agencies, with two in five reporting they do not know what the role is. The PECC gap is purely size-dependent, while pediatric mass casualty incident (MCI) procedures and infant mortality programs show regional patterns that run in opposite directions, revealing that different dimensions of pediatric readiness are driven by different institutional channels. Infant mortality program participation does not correlate with county-level infant mortality rates, contrasting with the need-driven MIH and SUD program distribution documented in Chapter 6. Most items were answered by approximately 185 to 223 of the 230 agencies, with transport equipment items limited to agencies that transport pediatric patients.

Results

PART 1: Transport and administrative support

Pediatric transport is near-universal among agencies that transport patients (97.2 percent), establishing the operational baseline against which the administrative support structure should be assessed (**Table 36**).

Table 36 *Pediatric emergency care capabilities (Q117, Q119, Q121, Q123, Q130).*

Capability	Agencies (n)	Percent
Transports pediatric or neonatal patients (n = 143)	139	97.2%
Incorporates pediatric or neonatal initiatives into quality improvement (n = 190)	154	81.1%
MCI procedure includes pediatric-specific information (n = 185)	137	74.1%
Has a Pediatric Emergency Care Coordinator or champion (n = 202)	61	30.2%
Conducts or participates in infant mortality reduction programs (n = 223)	44	19.7%

Source: *2026 FL EMS Agency Survey. Each row reports the share answering Yes; denominators are stated per row.*

Among the administrative supports measured, pediatric QI integration is the most common (81.1 percent), followed by pediatric-specific mass casualty procedures (74.1 percent), PECC designation (30.2 percent), and infant mortality reduction program participation (19.7 percent). QI integration is broadly uniform and does not vary by cohort, fire status, region, or rural designation, functioning as a system-wide baseline similar to infectious disease preparedness. Pediatric MCI procedures show significant regional variation: the Northeast reports substantially lower adoption than the Southeast (55.6 versus 81.8 percent; adjusted p = 0.003), extending a pattern of lower procedural adoption in that region observed for community hemorrhage control in Chapter 10. Volume cohort is also significant for MCI procedures (adjusted p = 0.033). The PECC role is strongly cohort-dependent, rising from zero in Cohort 1 to 51.7 percent in Cohort 5 (adjusted p < 0.001), with no other structural predictor reaching significance. The coordinator gap is a capacity and awareness issue rather than one differentiated by organizational type or geography.

PART 2: Clinical tools

Pediatric clinical tools are well standardized around a small number of products (**Table 37**).

Table 37 *Pediatric clinical tools: MCI triage, dosing, and transport devices (Q118, Q129, Q122).*

Tool	Agencies (n)	Percent
Pediatric MCI triage method (Q118; n = 172)		
JumpSTART	137	79.7%
RAMP	25	14.5%
SALT	4	2.3%
START	3	1.7%
Handtevy	2	1.2%
MOVES	1	0.6%
Age and weight-based dosing system (Q129; n = 221)		
Handtevy	129	58.4%
Broselow tape	85	38.5%
Local agency protocol	6	2.7%
Other	1	0.5%
Pediatric transport devices (Q122; n = 135)		
Pedi-Mate	103	76.3%
Pediatric car seat	49	36.3%
Neo-Mate	33	24.4%
Agency car seat	30	22.2%
Other	19	14.1%
KangooFix	18	13.3%

Tool	Agencies (n)	Percent
Isolette	5	3.7%

Source: *2026 FL EMS Agency Survey. Q118 and Q129 are single-select; Q122 is multiple-response among the 135 agencies transporting pediatric patients (Q121 = Yes) and does not sum to 100.*

JumpSTART is the dominant mass casualty triage method (79.7 percent), and age and weight-based dosing splits between Handtevy (58.4 percent) and the Broselow tape (38.5 percent). Among the 135 agencies that transport pediatric patients, the Pedi-Mate restraint is most common (76.3 percent), followed by pediatric car seats (36.3 percent) and the Neo-Mate (24.4 percent). The concentration of dosing around two products and triage around one indicates that the tool-based dimension of pediatric care is mature and operationally standardized across the state.

PART 3: Barriers to PECC and other pediatric initiatives

The barriers to designating a PECC are primarily about capacity and awareness (**Table 38**).

Table 38 *Barriers to identifying a PECC and pediatric quality improvement initiatives (Q128, Q131).*

Item	Agencies (n)	Percent
Barriers to identifying a PECC (Q128; n = 151)		
Staffing	85	56.3%
Unsure what a PECC is	62	41.1%
Funding	52	34.4%
Time	46	30.5%
Other	16	10.6%
Competing priorities	15	9.9%
Leadership buy-in	3	2.0%
Ongoing pediatric quality improvement initiatives (Q131; n = 150)		
Chart review	120	80.0%
Outcomes tracking	100	66.7%
Other	5	3.3%

Source: *2026 FL EMS Agency Survey. Both items are multiple-response and do not sum to 100. Q128 responding n = 151; Q131 responding n = 150.*

Staffing is the leading barrier (56.3 percent), but 41.1 percent of agencies report being unsure what a PECC is, ahead of funding (34.4 percent) and time (30.5 percent). The awareness gap is the most actionable finding: the PECC role can be filled by designating an existing staff member rather than hiring, which makes the 41 percent uncertainty about what the role entails a low-cost problem to address relative to the staffing and funding constraints

agencies also cite. Pediatric QI, where it occurs, relies on chart review (80.0 percent) and outcomes tracking (66.7 percent).

PART 4: Infant mortality programs

Infant mortality reduction programs reach only a fifth of agencies (19.7 percent), and a similar share (16.4 percent) perceive barriers to participating (**Table 39**). Among those perceiving barriers, funding (75.7 percent) and staffing (67.6 percent) dominate, followed by sustaining existing programs (56.8 percent). Facilitators, perceived by 33.9 percent of agencies, center on training and education (71.8 percent), public awareness (56.3 percent), and community partnerships (54.9 percent).

Table 39 *Barriers and facilitators for infant mortality reduction programs (Q124–Q127).*

Item	Agencies (n)	Percent
Perceives barriers to participating (Q124; n = 226)		
Yes	37	16.4%
No	189	83.6%
Barriers to participation (Q125; n = 37)		
Funding	28	75.7%
Staffing	25	67.6%
Sustaining existing programs	21	56.8%
Inconsistent training	13	35.1%
Awareness	13	35.1%
Cultural or linguistic challenges	6	16.2%
Community engagement	5	13.5%
Data access	4	10.8%
Other	3	8.1%
Geographic barriers	2	5.4%
Policy or regulatory	2	5.4%
Perceives facilitators (Q126; n = 221)		
Yes	75	33.9%
No	146	66.1%
Facilitators for participation (Q127; n = 71)		
Training and education	51	71.8%
Public awareness	40	56.3%
Community partnerships	39	54.9%
Access to funding	31	43.7%
Data analytics	26	36.6%
Evidence-based practices	26	36.6%
Policy support	15	21.1%
Cultural competency	7	9.9%

Item	Agencies (n)	Percent

Source: *2026 FL EMS Agency Survey. Both sections are multiple-response and do not sum to 100. Q125 (barriers) shown to agencies perceiving barriers (n = 37); Q127 (facilitators) shown to agencies perceiving facilitators (n = 71). Barrier and facilitator items are sorted by frequency.*

Program participation shows both a cohort gradient (13.5 percent in Cohort 2 to 59.3 percent in Cohort 5; adjusted $p < 0.001$) and an independent regional effect that runs in the opposite direction from pediatric MCI procedures: the Northeast and Southwest report significantly higher participation than the Southeast after controlling for cohort and fire status (Northeast $p = 0.012$; Southwest $p = 0.008$). The Northeast's combination of lower pediatric MCI adoption and higher infant mortality program participation suggests that different dimensions of pediatric readiness are driven by different regional institutional priorities rather than a uniform regional posture toward pediatric care.

Infant mortality reduction program participation does not track with the actual infant mortality burden in an agency's service area. County-level infant mortality rates (Florida Department of Health, 2025) show no correlation with program participation (Spearman rho = 0.017, $p = 0.81$), and adding county IMR to the adjusted model contributes nothing beyond what agency size and region already explain (likelihood ratio test $p = 0.40$). The Panhandle carries the highest county-level infant mortality rate of any BEMO region (median 7.3 per 1,000 live births, versus 4.9 in the Southeast), yet its program participation is not disproportionately higher after cohort adjustment. Program adoption is predicted by agency volume and by region but not by the epidemiologic need in the communities those agencies serve. This contrasts with the opioid-burden-driven pattern documented for MIH and SUD programs in Chapter 6 and suggests that infant mortality reduction programs in Florida's EMS system are institutionally rather than epidemiologically distributed.

Discussion

Pediatric readiness in Florida's EMS system is strong where it depends on equipment and standardized tools but substantially weaker where it requires organizational commitment. This distinction mirrors recent national findings, in which EMS agencies score highest in equipment, safety, and protocol domains but lowest in areas requiring sustained system integration, such as QI, coordination, and interaction with broader care systems (Adelgais et al., 2026). Consistent with longstanding national guidance, high-quality pediatric EMS care depends not only on equipment and protocols but also on system-level infrastructure, including leadership, coordination, education, and QI processes (Owusu-Ansah et al., 2020).

The Florida findings therefore align closely with national patterns: the tool-based dimension of pediatric care is mature, while structural elements lag.

The gap in PECC designation is particularly notable but not unique to Florida. Nationally, approximately 38 percent of EMS agencies report having a PECC, indicating that Florida's lower prevalence reflects broader system-level under implementation rather than a state-specific deficit (Adelgais et al., 2026). At the same time, national guidance has consistently emphasized PECCs as a central mechanism for integrating pediatric considerations into EMS system design, including oversight of education, QI, and protocol development (Owusu-Ansah et al., 2020). The finding that 41 percent of Florida agencies are unfamiliar with the role highlights an awareness gap that is likely more tractable than financial or staffing barriers, particularly given that national guidance explicitly allows the role to be incorporated into existing positions. In this context, the gap in Florida appears to reflect limitations in dissemination and organizational uptake rather than feasibility.

The observed volume cohort gradient, where PECC designation rises with agency size while pediatric QI integration remains broadly distributed, closely mirrors national patterns in pediatric readiness. National assessment data demonstrate that pediatric readiness increases with pediatric call volume and system resources, while domains such as QI and coordination remain comparatively weak across agencies regardless of size (Adelgais et al., 2026). This suggests that baseline practices, including policy adoption and participation in QI activities, diffuse relatively broadly, whereas dedicated coordination roles require organizational capacity that scales with agency size. As in other EMS domains, this creates a structural divide between smaller and larger agencies that is not easily addressed through equipment or protocol standardization alone.

The regional patterns observed in Florida also align with distinctions emphasized in the national literature between clinical capability and system participation. Pediatric readiness frameworks differentiate between agency-level preparedness, such as protocols, triage tools, and equipment, and participation in broader systems of care, including collaboration with hospitals, public health agencies, and community programs (Owusu-Ansah et al., 2020). The dissociation observed in the Northeast, where lower adoption of pediatric MCI procedures coexists with higher participation in infant mortality reduction programs, reflects these separate pathways. Procedural adoption appears to track with internal protocol maturity, whereas program participation is driven by external institutional relationships and community health infrastructure. This distinction reinforces that pediatric readiness is multidimensional and not reducible to a single axis of performance.

Infant mortality programming further illustrates the difference between clinical readiness and population health engagement. Its limited penetration and lack of alignment with epidemiologic burden diverge from the pattern observed in other EMS program domains, such as opioid response, where adoption clusters in high-burden areas. National pediatric EMS literature suggests that activities tied to broader social determinants of health, including maternal and infant outcomes, depend more heavily on coordination with external systems and funding structures than on EMS agency capacity alone (Owusu-Ansah et al., 2020). The absence of correlation between infant mortality rates and program participation in Florida is therefore consistent with a broader pattern in which EMS involvement in population health initiatives is mediated by institutional partnerships rather than need.

Finally, the question of how smaller agencies can adopt the PECC role is directly addressed in national guidance, which emphasizes flexibility in implementation, including incorporation into existing positions and use of regional or shared-resource models ((Owusu-Ansah et al., 2020)). Florida's findings suggest that the primary barriers are organizational rather than clinical, indicating that approaches focused on coordination, shared infrastructure, and targeted technical assistance may be more effective than those centered on expanding individual agency resources.

Overall, Florida's pediatric readiness profile closely reflects national EMS patterns. **Equipment, dosing tools, and standardized assessment frameworks are widely adopted, while organizational elements, particularly those related to coordination, leadership, and system integration, remain uneven**. The principal gaps are therefore structural rather than clinical, and align with national evidence indicating that improvements in pediatric readiness depend on strengthening system-level functions rather than expanding tool-based capabilities alone.

Limitations

The transport equipment items describe only the 135 to 143 agencies that transport pediatric patients. The infant mortality barrier and facilitator items were shown to the small subgroups perceiving each (37 and 71 agencies), so those percentages describe that subgroup. Several items use single-select brand categories, and the dosing figures aggregate labeled product variants into their parent brand. The PECC contact item (Q120) is excluded as PII.

The PECC designation rate of 30.2 percent is compared in the Discussion to the federal Health Resources and Services Administration (HRSA) EMS for Children (EMSC) performance target of 90 percent. Neither benchmark constitutes a regulatory requirement; the HRSA figure is a

programmatic goal and the Adelgais et al. estimate is a survey-based national average. Florida does not currently mandate PECC designation for EMS agencies. The comparison is provided for context and should not be read as a compliance finding.

The infant mortality correlation uses 2024 county-level infant mortality rates from the Florida Bureau of Vital Statistics matched to the agency's self-reported county. County-level rates in smaller counties are based on small numbers of deaths and may be unstable, and the matching assumes that the agency's county of operation is the relevant catchment area, which may not hold for agencies serving multiple counties. The null correlation should be interpreted as evidence that program participation does not track with county-level IMR at the agency level; it does not rule out the possibility that programs are appropriately targeted within their service areas through mechanisms this survey does not measure.

Chapter 12 | Trauma

BEMO Domain: Time-sensitive diagnoses event efforts (trauma)

The Trauma Care chapter examines prehospital trauma care practices across four areas identified by the trauma committee: clinical interventions and protocols, TXA and prehospital blood transfusion parameters, tourniquet adoption over time, and the reasons agencies give for not using selected practices. Airway monitoring is near-universal, while pharmacologic and mechanical interventions vary by resource intensity, from TXA at 64 percent to prehospital blood transfusion at 12 percent. Unlike most other clinical domains in this report, trauma interventions are remarkably structurally invariant. With the sole exception of TXA, no item varies significantly by volume cohort, fire status, region, or rural designation, suggesting that adoption in this domain is driven by medical director protocol decisions rather than organizational capacity. The Discussion situates Florida's trauma practices within the evolving national evidence base for hemorrhage management, physiologic monitoring, and damage control resuscitation. Most items were answered by approximately 185 to 228 of the 230 agencies.

Results

PART 1: Interventions and protocols

Airway monitoring is nearly universal, while trauma interventions vary widely by resource intensity (**Table 40**).

Table 40 *Trauma interventions, airway monitoring, hemorrhage control, and protocols (Q132, Q135, Q138, Q139, Q141, Q142, Q144, Q146).*

Item	Agencies (n)	Percent
Airway monitoring (before and after airway interventions)		
Measures oxygen saturation (SpO_2) (n = 229)	227	99.1%
Measures end-tidal CO2 ($EtCO_2$) (n = 229)	221	96.5%
Hemorrhage and trauma interventions		
Administers tranexamic acid (TXA) (n = 228)	146	64.0%
Uses pelvic binders for pelvic instability (n = 229)	117	51.1%
Administers antibiotics for open fractures (n = 228)	64	28.1%
Administers prehospital blood transfusion (n = 229)	29	12.7%
Trauma protocols		
Uses the suggested trauma pit crew format (n = 228)	102	44.7%
Follows motorcycle trauma transport protocols (n = 229)	35	15.3%

Source: *2026 FL EMS Agency Survey. Each row reports the share answering Yes; denominators are stated per row.*

Almost all agencies measure oxygen saturation (99.1 percent) and end-tidal carbon dioxide (96.5 percent) before and after airway interventions. TXA is administered by 64.0 percent of agencies and pelvic binders by 51.1 percent, while antibiotics for open fractures (28.1 percent) and especially prehospital blood transfusion (PHBT) at 12.3 percent remain minority practices. The suggested trauma pit crew format is used by 50.4 percent of agencies, complementing the broader pit crew findings reported in Chapter 4.

With the exception of TXA, these interventions are the most structurally invariant clinical domain in this report. Pelvic binder use, antibiotics for open fractures, PHBT, the trauma pit crew format, and the MCI triage protocol show no significant variation by volume cohort, fire status, region, or rural designation in adjusted analyses. Adoption in this domain appears to be driven by medical director protocol decisions rather than by the organizational capacity and resource gradients that predict adoption elsewhere in the report.

PART 2: TXA and prehospital blood transfusion

Where these interventions are used, their parameters are standardized (**Table 41**).

Table 41 *Tranexamic acid and blood transfusion practices (Q133, Q134, Q136, Q137).*

Practice	Agencies (n)	Percent
TXA standard dosage (Q134; n = 144)		
2 g bolus	77	53.5%
1 g bolus	31	21.5%
1 g bolus followed by 1 g infusion	11	7.6%
Other	25	17.4%
TXA patient selection criteria (Q133; n = 143)		
Systolic BP < 90 mmHg	122	85.3%
Heart rate > 110 bpm	97	67.8%
Glasgow Coma Scale	50	35.0%
Other	33	23.1%
Blood component used (Q137; n = 28)		
Whole blood	17	60.7%
Packed red blood cells	12	42.9%
Fresh frozen plasma	7	25.0%
Other	7	25.0%
Transfusion initiation criteria (Q136; n = 28)		
SBP < 90 and HR > 110	22	78.6%
SBP < 70	16	57.1%
Other	14	50.0%
Penetrating trauma	11	39.3%

Source: *2026 FL EMS Agency Survey. TXA items (Q133, Q134) are reported among the 144 agencies administering TXA; blood items (Q136, Q137) among the 28 administering prehospital transfusion. Criteria and component items are multiple-response and do not sum to 100.*

Among the 144 agencies administering TXA, a 2 gram bolus is the most common dosage (53.5 percent), followed by a 1 gram bolus (21.5 percent), and patient selection is driven primarily by hypotension, with systolic blood pressure below 90 mmHg the leading criterion (85.3 percent). Among the 28 agencies providing PHBT, whole blood is the most common component (67.9 percent), followed by packed red blood cells (64.3 percent), and the leading selection criterion is hemorrhagic shock (85.7 percent).

TXA is the sole trauma intervention that varies by agency characteristics. Adoption rises with agency volume (50 percent in Cohorts 1 and 2 to 83.3 percent in Cohort 5; adjusted p = 0.005), and non-fire agencies are significantly more likely to administer it than fire agencies of

equivalent size (77.1 versus 58.8 percent; adjusted p = 0.014). The non-fire TXA advantage extends the reversed organizational-type pattern observed for HIE participation, performance incentives, and customer input in earlier chapters, and may reflect faster protocol adoption cycles in non-fire medical direction environments. PHBT shows no significant variation by any structural predictor, consistent with its dependence on blood product supply agreements and medical director authorization rather than on agency-level characteristics.

PART 3: Tourniquet adoption over time

Tourniquet (TQ) use for bleeding control is long established, and most agencies report adopting it within the past two decades (**Figure 11**).

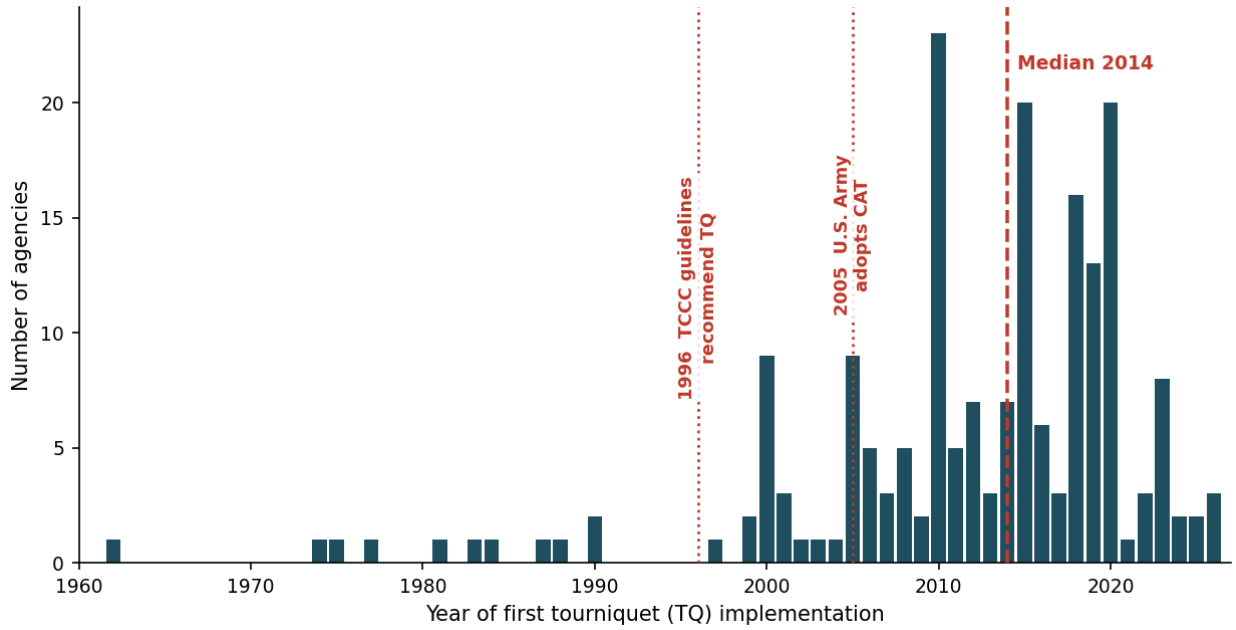

Figure 11 *Year of first tourniquet (TQ) implementation, self-reported (n = 195).*

Note*: The dotted reference lines mark the 1996 Tactical Combat Casualty Care guidelines, which formally recommended TQ use, and the 2005 U.S. Army adoption of the Combat Application Tourniquet (CAT). The dashed line marks the median implementation year, 2014. One agency entered a non-interpretable year (zero) and is excluded; nine agencies reported dates before 1990.*

Among the 195 agencies reporting a usable implementation year, the median was 2014, with 52.8 percent adopting in the 2010s and a further 20.0 percent since 2020. Adoption is negligible before the mid-1990s and rises after 2000, tracking the diffusion of tourniquet practice from military into civilian use. The two inflection points in the adoption curve align with the 1996 Tactical Combat Casualty Care guidelines, which formally recommended tourniquet use, and the 2005 U.S. Army adoption of the Combat Application Tourniquet.

PART 4: Explanation questions

Agencies that do not use the suggested trauma pit crew format gave reasons that were mostly structural rather than clinical (**Table 42**).

Table 42 *Reasons agencies do not use the suggested trauma pit crew format (Q140).*

Reason (primary)	Agencies (n)	Percent
Not a scene-response provider (interfacility, hospital-based, or non-transport)	29	27.9%
Unaware of or unfamiliar with the format	18	17.3%
Not yet adopted; implementation or training in progress	15	14.4%
Insufficient staffing or crew size	13	12.5%
Poor fit for trauma, or not perceived as needed	10	9.6%
Medical director or protocol has not adopted it	8	7.7%
Uses an alternative or modified pit-crew approach	6	5.8%
Other or non-specific	5	4.8%

Source: *2026 FL EMS Agency Survey. Free-text responses from the 104 agencies not using the format, coded to a single primary reason. A small number of responses cited more than one reason; only the dominant reason is tabulated.*

The largest group, 27.9 percent of the 104 respondents, indicated that the format does not apply to them because they are interfacility, hospital-based, or otherwise non-scene providers. The next most common reasons were being unaware of or unfamiliar with the format (17.3 percent) and not having adopted it yet but with implementation or training in progress (14.4 percent). Only 9.6 percent described the format as a poor fit for trauma or not needed, suggesting that clinical objection is rare and the gap is primarily one of applicability, awareness, and implementation timing. This parallels the pit crew adoption findings in Chapter 4, where cardiac arrest protocols are near-universal but extension to other conditions remains uneven.

Among agencies not using pelvic binders, the reasons were more clinical and resource-related (**Table 43).**

Table 43 *Reasons agencies do not use pelvic binders (Q145).*

Reason (primary)	Agencies (n)	Percent
Not in protocol, or medical director has not approved or required it	22	23.7%
Not a scene-response provider (interfacility, hospital-based, or non-transport)	18	19.4%
Unknown, unsure, or not evaluated	14	15.1%
Cost, budget, or funding	13	14.0%
Evidence or data concerns	8	8.6%
Uses an alternative method (sheets, blankets, or other tools)	7	7.5%
Equipment not carried or stocked	5	5.4%
In progress or under consideration	3	3.2%
Provided by the county or another transporting agency	3	3.2%

Source: *2026 FL EMS Agency Survey. Free-text responses from the 93 agencies not using pelvic binders, coded to a single primary reason. A small number of responses cited more than one reason; only the dominant reason is tabulated.*

The leading reason, given by 23.7 percent of the 93 respondents, was that binders are not in the agency's protocol or have not been approved or required by the medical director. As with the pit-crew item, a substantial share, 19.4 percent, were non-scene providers for whom the device does not apply. Cost, budget, or funding was cited by 14.0 percent, and a further 8.6 percent raised evidence or data concerns, several describing binders as of uncertain or limited prehospital benefit. Some agencies reported using an alternative method such as a sheet wrap (7.5 percent) or simply not carrying the equipment (5.4 percent), while a small number rely on the county or another transporting agency to provide it (3.2 percent). The remaining 15.1 percent gave unknown, unsure, or non-specific answers.

Among the eight agencies reporting that they do not routinely measure $EtCO_2$ before airway interventions, three distinct patterns emerge (**Table 44**).

Table 44 *Reasons for not routinely measuring $EtCO_2$ before airway interventions (Q143).*

Theme	Response (verbatim)	n
Equipment not available	*"We do not have nasal capnography. We do post ET tube."*	2
	"Don't have the ability."	
Measured after, not before	*"$EtCO_2$ is required to be monitored before airway interventions. Most personnel measure before, but it is not always possible."*	3
	"In most cases $EtCO_2$ is only measured after airway interventions."	
	"Generally an afterthought."	
Scope not applicable	*"We are a non-emergency BLS interfacility transport provider."*	3
	"BLS service."	
	"We never intubate; most patients are stable."	

Source: *2026 FL EMS Agency Survey. Free-text responses from the 8 agencies reporting they do not routinely measure $EtCO_2$ before airway interventions. Responses are reproduced verbatim and classified by primary theme.*

Three agencies indicated that the question does not apply to their scope of practice: two operate BLS services that do not perform intubation and one is a non-emergency interfacility transport provider. Three agencies measure $EtCO_2$ after airway interventions rather than before, describing it as an afterthought or noting that pre-intervention measurement is not always possible despite being protocol. Two agencies reported lacking the equipment entirely, with one specifying the absence of nasal capnography capability. The small number of non-compliant agencies and the concentration of responses in scope-of-practice and workflow-sequencing explanations rather than clinical disagreement suggest that the 96.5 percent pre-intervention measurement rate reflects genuine operational practice rather than social desirability, and that the residual gap is largely structural.

Discussion

The trauma care profile in Florida reflects an evolution from protocol-driven intervention to physiology-guided hemorrhage management. Core tools and therapies, including TXA, pelvic binders, physiologic monitoring, and prehospital blood transfusion (PHBT), are widely present, but their application remains variably aligned with current evidence. This pattern mirrors national EMS findings, in which the diffusion of individual interventions has outpaced standardization of evidence-based indications and integrated resuscitation strategies (Levy et al., 2025; Owusu-Ansah et al., 2020).

Prehospital blood transfusion represents the clearest example of this gap between standardization and implementation. Nationally, PHBT has expanded rapidly across both air and ground systems in response to evidence demonstrating that early administration of blood products in hemorrhagic shock improves survival (Levy et al., 2025). These findings are consistent with damage control resuscitation frameworks formalized through THOR (Trauma Hemostasis and Oxygenation Research), which emphasize early reversal of hypovolemia, oxygen debt, and coagulopathy through balanced transfusion rather than delayed crystalloid resuscitation (Jenkins et al., 2014).

A critical distinction in PHBT is the type of product administered, which carries direct physiologic implications. Nationally, programs operate across three primary models: low-titer group O whole blood (LTOWB), component therapy combining packed red blood cells and plasma, and plasma-only resuscitation (Joint Trauma System, 2019). Whole blood provides the most physiologically complete resuscitation by restoring oxygen-carrying capacity, clotting factors, and intravascular volume simultaneously, whereas component therapy approximates this balance and plasma-only strategies primarily target coagulopathy (Guyette et al., 2021; Levy et al., 2025). Evidence consistently demonstrates that balanced blood product resuscitation outperforms crystalloid-based strategies, with plasma use associated with reduced mortality in appropriate patient populations (Sperry et al., 2018). Florida's PHBT findings should therefore be interpreted not simply as presence or absence of transfusion capability, but in relation to the type of product delivered, as this determines the degree to which field resuscitation aligns with modern trauma physiology.

Indications for transfusion similarly reflect a shift to physiologically driven decision-making. National guidance emphasizes recognition of clinical hemorrhagic shock rather than laboratory thresholds, using indicators such as hypotension, tachycardia, altered mentation, and mechanism of injury to guide early transfusion (Levy et al., 2025). These criteria are closely aligned with THOR recommendations and reinforce that PHBT functions as a time-sensitive resuscitation strategy, not simply an adjunct to transport.

TXA use in Florida reflects a more mature stage of evidence adoption but retains similar issues in application. The CRASH-2 trial demonstrated a mortality benefit in bleeding trauma patients receiving TXA, particularly when administered early (CRASH-2 trial collaborators et al., 2010). Subsequent analyses established that benefit is time-dependent, with treatment within three hours of injury associated with improved survival and later administration associated with no benefit or potential harm (CRASH-2 collaborators et al., 2011). More recent U.S. guidance continues to support TXA as a safe intervention that may reduce mortality when used selectively in patients with evidence of hemorrhagic shock, while emphasizing

that it should not delay transport or definitive hemorrhage control (Barrett et al., 2025). Florida's TXA adoption should therefore be interpreted within this framework. It is a targeted adjunct, not a universal trauma intervention, and its effectiveness depends on timing and appropriate patient selection.

Pelvic binder use demonstrates a divergence between longstanding practice and evolving evidence. Although pelvic circumferential compression devices are widely used in prehospital care, recent national reviews indicate that pelvic fractures are infrequently the primary source of hemorrhagic shock and that prehospital binder application has not consistently demonstrated reductions in mortality or transfusion requirements (Lyng et al., 2025). Misapplication is common, and incorrect placement may worsen certain fracture patterns or obscure alternative bleeding sources (Lyng et al., 2025). Current guidance therefore emphasizes selective use based on clinical instability and suspected pelvic disruption, rather than routine application based on mechanism alone (Lyng et al., 2025). Florida's pattern is consistent with national experience, where binder availability is high but use remains variable.

Physiologic monitoring, particularly through pulse oximetry (SpO_2) and end-tidal carbon dioxide ($ETCO_2$), represents a domain closely aligned with current best practice. These measures capture complementary aspects of physiology: SpO_2 reflects oxygenation, while $ETCO_2$ reflects the interaction of ventilation, perfusion, and metabolism. Evidence demonstrates that low prehospital $ETCO_2$ values are associated with increased mortality and need for massive transfusion, often outperforming traditional markers such as systolic blood pressure in identifying early shock (Wham et al., 2023). Systematic reviews confirm that $ETCO_2$ is a reliable predictor of outcomes in trauma, with lower values correlating with worse survival (Al-Aomar et al., 2025).

The critical role of these measures lies not in isolated readings but in trend analysis before and after intervention. Changes in $ETCO_2$ and SpO_2 following airway management, ventilation adjustments, or resuscitation reflect real-time physiologic response and provide immediate feedback on intervention effectiveness (Kodali & Urman, 2014). National guidance increasingly emphasizes continuous monitoring and integration of these data into clinical decision-making rather than documentation alone (Owusu-Ansah et al., 2020).

In summary, Florida's trauma findings align closely with national EMS patterns. There is broad adoption of individual interventions, including TXA, pelvic binders, physiologic monitoring, and emerging PHBT capability, but less consistent translation of evidence into coordinated, physiology-driven resuscitation. The central distinction is between performing

interventions and integrating them. Contemporary prehospital trauma care is increasingly defined not by the presence of specific tools, but by the ability to apply them selectively, early, and in combination, guided by patient physiology and supported by an evolving evidence base.

Limitations

The TXA detail items describe the 143 to 144 agencies using it, and the blood transfusion detail items describe only the 28 agencies providing it, a small base whose percentages should be interpreted accordingly. The TQ implementation year excludes 10 records with implausible pre-1990 entries, including one of zero. The TQ implementation years are self-reported and were not verified against agency records. Nine agencies reported dates before 1990, which are more plausibly last-resort use than the adoption of a standing tourniquet protocol, and one agency entered a zero that cannot be interpreted as a year and is treated as missing. These values are retained in the reported distribution, and the median is unaffected by their inclusion.

The free-text reasons for non-adoption of the pit crew format, pelvic binders, and end-tidal carbon dioxide (Q140, Q143, Q145) were coded to a single primary reason under an inductive scheme. The categories are interpretive, a few responses cited more than one reason, and the coding should be read as an organizing summary rather than a precise measurement. Per-response code assignments are retained for audit.

The subgroup analyses testing trauma interventions against volume cohort, fire status, region, and rural designation use the same joint logistic framework applied throughout the report. The structural invariance observed for most trauma items (i.e., no significant variation by any predictor) limits the analytical contribution of the predictor framework in this chapter relative to others. The reversed fire-status finding for TXA is an observational association; the survey does not capture medical director protocol review timelines, governance structures, or the institutional factors that may explain why non-fire agencies adopt TXA at higher rates.

Limitations

This report rests on a single cross-sectional survey administered in 2026 and shares the limitations inherent to that design. All findings are associational; no causal claims can be drawn from the observed relationships between agency characteristics and operational practices. The survey captures a snapshot of the Florida EMS system at one point in time and cannot track changes within individual agencies across years. Although year-over-year response-rate comparisons are made against the 2025 survey, the two samples are not matched panels. A given agency may have responded in one year but not the other, so item-level trends should be read as system-level shifts rather than as within-agency change.

All data are self-reported and no item was independently verified through observation, record review, or third-party confirmation. The survey was addressed to a single contact per agency, but the extent to which respondents consulted colleagues, referenced records, or answered from memory is unknown and likely varied across agencies and across items within the same agency. Reported adoption rates for clinical practices, programs, and protocols therefore reflect what agencies report rather than what they demonstrably do, and social desirability bias may inflate affirmative responses. The breadth of the instrument, spanning workforce, clinical operations, community engagement, data systems, disaster preparedness, pediatric care, and trauma, means that accurate responses across all domains may require input from multiple people within the agency, and the degree to which that occurred is not measurable.

The unit of analysis is the agency, not the individual provider, patient, or community. An agency reporting a capability does not mean that all providers within it are trained in or consistently deliver that capability, and the survey cannot characterize variation in practice within agencies. Similarly, most items are binary. They capture whether a capability, program, or protocol exists but not how well, how consistently, or how recently it has been implemented. The distinction between having a protocol and following it is not measurable with these data.

The same analytic framework used throughout the report: simultaneous testing of volume cohort, fire status, BEMO region, and rural designation as predictors. This treats call volume as a proxy for agency size, resource capacity, and organizational complexity. Volume is correlated with but does not directly measure these constructs, and the cohort boundaries are derived from the distribution of responding agencies rather than from external benchmarks. Geographic attribution assumes that each agency operates primarily in its

reported county and BEMO region, though some agencies serve multiple counties and dispatch arrangements may cross regional boundaries.

The response rate of 69.5 percent (214 of 308 in-state ground agencies) is adequate for descriptive analysis but leaves open the possibility that non-responding agencies differ systematically from respondents. The non-response bias assessment in Chapter 1 addresses this directly and should be consulted when interpreting any finding where non-response could differentially affect a subgroup. BLS-only agencies are under-represented, and findings for that segment carry wider uncertainty than those for the ground ALS system that dominates the respondent pool. Air agencies are included in the analytic sample but the survey instrument was designed by the EMSAC committees to primarily address ground EMS operations, and most module content is not tailored to the air service environment. A separate air-specific survey instrument would be needed to characterize that segment with the same depth applied to ground agencies throughout this report.

Conclusions

In summary, the twelve chapters of this report describe a system whose variation is not random but patterned, and the pattern itself is informative. Four characteristics, call-volume cohort, fire-versus-non-fire status, BEMO region, and rural designation, were tested jointly against nearly every measured practice and capability in this survey. What that consistent framework reveals across chapters is that these four factors are not interchangeable proxies for agency quality or resource level. Each operates on a different and largely separable axis of the Florida EMS system, and the chapters in which one factor dominates are as analytically informative as the chapters in which it does not.

Agency scale, measured by call-volume cohort, is the closest the system has to a master variable. It is the strongest predictor, often the only significant predictor, of vehicle staffing flexibility, medical director expenditure, dedicated mental health staffing and program breadth, stroke coalition membership, MIH/CP program adoption, data infrastructure participation, disaster coalition and FirstNet participation, PECC designation, and TXA administration. Where volume does not predict an outcome, the exception is informative, though not for a single uniform reason. Workforce shortage prevalence and self-reported performance metric maturity are flat across the system without an identified driver; infectious disease preparedness is flat in a way the report attributes to a shared post-pandemic investment floor; and most trauma interventions, hemorrhage control protocols and kits among them, are flat because adoption in that domain appears to follow individual medical director decisions rather than organizational capacity. Scale predicts breadth and infrastructure, in other words, but not whether an agency clears a baseline the rest of the system has already cleared, and not every such baseline has the same origin.

Organizational type operates on a second axis that does not collapse into scale, and it does not point in a single direction. Fire-based agencies hold a clear and repeated advantage where capability depends on co-location, command integration, or the stable municipal employment structures common to fire departments: tactical response, dispatch-level clinical practice, pediatric community risk reduction, and, consistent with that employment structure, markedly lower turnover and higher base salary. A second, smaller cluster of findings runs in the opposite direction, and it recurs too often across the report to be incidental. Non-fire agencies are significantly more likely to collect structured customer feedback (Chapter 7), to participate in the Florida HIE and to tie performance metrics to incentives (Chapter 8), to provide medication-assisted treatment for substance use disorder independent of MIH program status (Chapter 6), and to administer TXA (Chapter 12), with a

similar, just short of significant, pattern in county health department disaster agreements (Chapter 10). The survey cannot establish why this reversal occurs, but its consistency across four independent chapters and four substantively different kinds of practice, one administrative, one technological, one pharmacological in two domains, suggests it is not noise. A plausible reading is that the practices where fire agencies lead are anchored to physical infrastructure and institutional position that fire departments already occupy, while the practices where non-fire agencies lead are ones that reward faster protocol turnover, external benchmarking, or contractual accountability, conditions more characteristic of private, hospital-based, and governmental non-fire operating environments than of fire department governance. Neither cluster should be read as evidence that one organizational model is generally superior; the report instead describes two distinct routes by which different categories of capability accumulate.

Region behaves differently still. For most outcomes in this report, an apparent regional effect attenuates once agency size is taken into account, because the five BEMO regions differ in their mix of agency sizes more than they differ in regional practice. Two findings break that pattern, and they are instructive precisely because they look similar on the surface and are not similar underneath. The Panhandle, despite having the smallest average agency size of any region, reports the state's highest rate of MIH/CP program adoption (47.1 percent) and the most concentrated reliance on opioid settlement funding to support it, a pattern that persists after adjustment for size, fire status, and rural designation and that aligns with the region's elevated opioid burden. Naloxone leave-behind programs, concentrated in the same two regions, Central Florida and the Panhandle, at three to five times the rate of the Southeast and Northeast, extend the same association. Set against this, infant mortality reduction program participation, on its face a comparable community health program with comparable regional variation, shows no relationship to county-level infant mortality rates (Spearman rho = 0.017, p = 0.81), even though the Panhandle carries the highest county-level infant mortality rate in the state. Programs predict where other programs are, and agency size and region predict program adoption, but documented epidemiological burden alone predicts neither. The opioid-related cluster appears need-driven because settlement funding created an explicit, traceable mechanism connecting burden to program dollars; without an analogous funding or referral mechanism, regional clustering in infant mortality programming reflects institutional history rather than the distribution of need. The lesson for interpreting any future regional concentration in this system is that the concentration itself is not evidence of need-based targeting; the burden has to be tested directly, as it was here, rather than inferred from the geography of program counts.

Rural designation is the most attenuated of the four predictors and, where it persists, the most narrowly focused. Most apparent rural disadvantages in this report, in workforce composition, salary, and tactical readiness, are compositional: they disappear once cohort and fire status are held constant, because rural agencies are disproportionately small and non-fire. Two findings do not disappear. Rural agencies report markedly lower perceived sufficiency of local mental health providers trained for first-responder needs (21.4 versus 59.4 percent, $p < 0.001$), the single sharpest rural finding in the report, and lower dispatch-level stroke screening (38.9 versus 71.0 percent, adjusted $p = 0.003$), independent of the separate fire-status effect already present in that same measure. Both concern access to a specialized resource located outside the agency itself, a behavioral health workforce in one case and dispatch center clinical infrastructure in the other, rather than a capability the agency can build internally regardless of resources. This is a different kind of disadvantage than the scale and organizational-type effects described above; it cannot be closed by an individual agency growing larger or changing form, because the constraint sits in the surrounding service ecosystem rather than the agency. Rural status is not, on this evidence, a generalized handicap. It is concentrated where the relevant resource is geographically scarce, and notably absent, or even reversed, where it is not, as in naloxone leave-behind and group-focused community risk reduction, both adopted at higher rates by rural agencies after adjustment.

Taken as a whole, the report describes a system in which most measured variation traces to organizational scale and form rather than to geography or epidemiological need, with the explicit exception of programs tied to an identifiable funding or referral channel connecting need to capacity, and a narrow but real residual category of rural disadvantage concentrated in access to resources that sit outside any single agency's control. None of these findings establishes causation, and several of the more striking associations, the organizational-type reversal chief among them, describe a pattern the available data can characterize but not explain. What the consistent four-predictor framework applied throughout this report does establish is that these characteristics are not redundant; each does distinct analytical work, and a finding attributed to one of them, scale, organizational type, region, or rurality, should be read as a finding about that specific axis rather than assumed to generalize to the others. The Panhandle comparison offers the clearest practical lesson: a regional concentration of program adoption is not, by itself, evidence that regional need produced it. Here, that claim could be tested directly against county-level burden data and held for opioid response while failing for infant mortality reduction; future interpretation of this report's regional findings should apply the same direct test rather than infer need from the geography of adoption alone.]

Appendix A — 2026 Annual EMS Agency Survey Instrument (v2.1)

2026 Annual EMS Agency Survey

WELCOME

Your feedback is important to us and provides crucial data for supporting programs and developing the baseline for the EMS State Plan. The results of this survey will also be used to determine your agency's needs and assist with allocating possible future state funding and resources that may become available. We kindly ask that you complete the entire survey by April 30, 2026. IMPORTANT: Failure to complete this survey may result in your agency not being included in the potential distribution of future state resources. If you need any assistance, please contact EMS@flhealth.gov or call 850-245-4440.

1 Please confirm the EMS agency name and associated license number for the agency you are reporting on. If you represent more than one agency, please complete a separate survey for each. Do not combine or aggregate data across agencies.
[text entry]

2 Please select your agency's level of licensed service.

Options: Advance life support (ALS) only · Basic life support (BLS) only · ALS and BLS

3 Which of the following describes your agency's primary type of service?

Options: 9-1-1 response with ground transport · 9-1-1 response without ground transport · Ground interfacility transport only · Ground 9-1-1 response and ground interfacility transport · Air rotor-wing 9-1-1 response only · Air rotor-wing interfacility transport only · Air rotor-wing 9-1-1 response and rotor-wing interfacility transport · Air rotor-wing and ground interfacility transport · Air fixed-wing interfacility transport only · Air fixed-wing and ground interfacility transport

SELECT

Please select which module you would like to complete at this time.

Options: General and Medical Direction · Agency Workforce · Medical Care · Mental Health, Safety, and Wellness · Community Paramedicine / Mobile Integrated Health · Public Information, Education, and Relations (PIER) · EMS Data and Quality Improvement · Telecommunications · Emergency/Disaster Preparedness · EMS for Children · Trauma Patients · Submit survey (Only select once all modules are completed)

GENERAL AND MEDICAL DIRECTION

General and Medical Direction

4 Please enter your contact information below.

Fields: Name of person completing the survey · Title · Email address · Phone number

5 Please select your organization type. (Select all that apply.)

Options: Fire department · Governmental non-fire · Hospital · Private non-hospital · Tribal

Fields: Other

6 Please select your organizational tax status.

Options: For-profit · Not-for-profit · Other (e.g. government)

Shown if Q3 = 9-1-1 response with ground transport / Ground 9-1-1 response and ground interfacility transport / 9-1-1 response without ground transport

7 On an average day, what is the minimum number of permitted frontline ground vehicles that your agency has staffed (e.g., available for dispatch)? *[text entry]*

Shown if Q3 = 9-1-1 response with ground transport / Ground 9-1-1 response and ground interfacility transport / 9-1-1 response without ground transport

8 On an average day, what is the maximum number of permitted frontline ground vehicles that your agency has staffed (e.g., available for dispatch)? *[text entry]*

9 Is your agency currently experiencing a shortage of EMTs or paramedics?

Options: Yes, my agency is experiencing a shortage of EMTs · Yes, my agency is experiencing a shortage of paramedics · Yes, my agency is experiencing a shortage of both EMTs and paramedics · No, my agency is not currently experiencing a shortage of EMTs or paramedics

Shown if Q2 = Basic life support (BLS) only / ALS and BLS

10 Please indicate the number of EMT positions related to your agency. (If not applicable, please enter 0.)

Fields: Total number of budged positions (when fully staffed): · Total number of current vacancies:

Shown if Q2 = Advance life support (ALS) only / ALS and BLS

11 Please indicate the number of paramedic positions related to your agency. (If not applicable, please enter 0.)

Fields: Total number of budged positions (when fully staffed): · Total number of current vacancies:

12 Is your agency's medical director paid or volunteer?

Options: Paid · Volunteer

13 Is your agency's medical director full-time or part-time?

Options: Full-time (greater than 30 hours per week) · Part-time (less than 30 hours per week)

Shown if Q12 = Paid

14 Please select the range that your agency spends on medical direction in terms of total costs.

Options: < $50,000 · $50,001 to $100,000 · $100,001 to $150,000 · $150,001 to $200,000 · $200,001 to $250,000 · $250,001 to $300,000 · $300,001 to $350,000 · $350,001 to $400,000 · $400,001 to $450,000 · $450,001 to $500,000 · > $500,000

15 Please indicate the number of EMTs, paramedics, and medical directors (including associate and/or assistant directors) for your agency.

Fields: Total number of EMT full-time equivalents · Total number of paramedic full-time equivalents · Total number of medical director full-time equivalents

Thank you for completing the "General and Medical Direction" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

AGENCY WORKFORCE

Agency Workforce

Shown if Q2 = Basic life support (BLS) only / ALS and BLS

16 Please provide an estimate of the annual base salary for your agency's full-time EMT positions.

	<$20,000	$20,001 to $40,000	$40,001 to $60,000	$60,001 to $80,000	$80,001 to $100,000	>$100,000	N/A
Entry-level EMT	○	○	○	○	○	○	○
Top-out EMT	○	○	○	○	○	○	○

Shown if Q2 = Advance life support (ALS) only / ALS and BLS

17 Please provide an estimate of the annual base salary for your agency's full-time paramedic positions.

	<$20,000	$20,001 to $40,000	$40,001 to $60,000	$60,001 to $80,000	$80,001 to $100,000	>$100,000	N/A
Entry-level EMT	○	○	○	○	○	○	○
Top-out EMT	○	○	○	○	○	○	○

18 Which of the following human resource practice benchmark(s) does your agency utilize? (Select all that apply.)

Options: Benefit comparison · Salary comparison · Team satisfaction scores · Turnover rates · None of the above

Fields: Other

19 Which of the following employee morale and retention strategies are present at your agency? (Select all that apply.)

Options: Bonuses · Career Advancement · Childcare (onsite) · Childcare (reimbursement) · Childcare (vouchers) · Flexible schedules · Mechanism to ensure bottom-up communication · Monitoring employee satisfaction · Personal financial planning services · Recognition/rewards · Tuition reimbursement (directly or indirectly work related) · Wellness programs

20 Select the percentage range that reflects your agency's annual turnover rate.

Options: 0-5% · 6-10% · 11-15% · 16-20% · 21-25% · 26-30% · > 30%

Thank you for completing the "Agency Workforce" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

MEDICAL CARE

Medical Care

21 Please provide contact information for your agency's designated point of contact who is responsible for training.

Fields: Name · Title · Email address · Phone number

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

22 Which of the following time-sensitive diagnoses does your agency use a "pit crew" approach for? (Select all that apply.)

Options: Cardiac arrest · Sepsis · ST-elevation myocardial infarction (STEMI) · Stroke · Trauma · None of the above

Fields: Other

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

23 Which of the following barriers does your agency experience with regards to stroke recognition and treatment? (Select all that apply.)

Options: Availability or cost of training materials · Training · None of the above

Fields: Other

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

24 Does your agency conduct or participate in any stroke awareness programs?

Options: Yes · No

Shown if Q24 = No; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

25 Would you like more information about stroke awareness programs?

Options: Yes · No

Shown if Q24 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

26 Please provide the name of the stroke awareness program. *[text entry]*

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

27 Does your agency participate in a stroke coalition?

Options: Yes · No

Shown if Q27 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

28 Which of the following stroke coalitions does your agency participate in? (Please select all that apply.)

Options: Emerald Coast Stroke Coalition · Florida Suncoast Stroke Coalition · FOAM-D Stroke Coalition · Gulf Stream Stroke Coalition · Northeast Florida Stroke Coalition · South Florida Stroke Coalition · West Central Florida Stroke Council

Fields: Other

Shown if Q27 = No; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

29 Would you like more information about stroke coalitions?

Options: Yes · No

30 Does your agency perform a bundle of care for resuscitation that includes heads up CPR with an impedance threshold device?

Options: Yes · No

Shown if Q30 = No

31 Does your agency plan to implement a bundle of care for resuscitation that includes heads up CPR with an impedance threshold device in the next 12 to 24 months?

Options: Yes · No

Shown if Q31 = No

32 Would you like more information regarding a bundle of care for resuscitation that includes heads up CPR with an impedance threshold device?

Options: Yes · No

33 Does your agency follow any specific motorcycle-related trauma transport protocols (not counting paramedic judgement or state scorecard criteria)?

Options: Yes · No

Thank you for completing the "Medical Care" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

MENTAL HEALTH, SAFETY, AND WELLNESS

Mental Health, Safety, and Wellness

34 Please provide the contact information for your agency's designated point of contact for your mental wellness program/resources.

Fields: Name · Title · Email address · Phone number

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport

35 Does your agency provide or have access to Traffic Incident Management (TIM) training for your EMS personnel?

Options: Yes · No

36 Which behavioral health assistance program (BHAP) components are accessible to EMS providers in your agency? (Select all that apply.)

Options: Chaplain Program · Critical Incident Stress Management (CISM) · Employee Assistance Program (EAP) · Licensed Mental Health Clinicians · Peer Support Team · Therapy Dog Program · Wellness/Resiliency Program · None of the above

Fields: Other (please specify)

37 Within your organization, who has primary responsibility to oversee the mental wellness resources/programs? (Select all that apply.)

Options: Full-time position dedicated to mental wellness program (e.g., Agency Mental Wellness Coordinator) · Health and Safety Officer · Part-time position dedicated to mental wellness program, partnership (e.g., local union or benevolent) · Part of another person's duties and responsibilities (e.g., Deputy Chief or Training Captain)

Fields: Other

38 What curriculum does your agency use to provide training and education on mental health, wellness, resiliency, and suicide prevention? (Select all that apply.)

Options: Mental Health First Aid (MHFA) · Our own internal training · Program developed by a local provider/partner organization · Struggle Well

Fields: Other

39 Does your agency provide (or have access to) a minimum of three (3) hours of behavioral health suicide prevention to your employees annually?

Options: Yes · No

40 Does your agency have policies in place for individuals who might seek or need help with job-related behavioral health issues?

Options: Yes · No

41 In your local area, do you feel that there are a sufficient number of mental health providers specifically trained to address the unique mental health needs of first responders?

Options: Yes · No

Thank you for completing the "Mental Health, Safety, and Wellness" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

COMMUNITY PARAMEDICINE/MOBILE INTEGRATED HEALTH

Community Paramedicine/ Mobile Integrated Health

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

42 Does your agency provide Community Paramedicine (CP) and/or Mobile Integrated Health (MIH) services?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport; and Q42 = Yes

43 Please provide the contact information for your agency's Community Paramedicine (CP) or Mobile Integrated Health (MIH) program representative.

Fields: Name · Title · Email address · Phone number

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Ground interfacility transport only

44 Does your agency have a written agreement with the county health department for immunizations or public-health programs?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / Ground 9-1-1 response and ground interfacility transport

45 Does your agency transport medically appropriate 9-1-1 patients to alternative non-ED destinations?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / Ground 9-1-1 response and ground interfacility transport

46 Does your agency transport patients from 9-1-1 scenes to non-hospital SUD specialty centers?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / Ground 9-1-1 response and ground interfacility transport

47 Does your agency provide care coordination for patients seeking SUD recovery services?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

48 Does your agency provide buprenorphine (Suboxone® or Subutex®) or any other medication for SUD patients when medically appropriate?

Options: Yes · No

Shown if Q42 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

49 Is your MIH/CP program actively connected to the county health department?

Options: Yes · No

Shown if Q42 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

50 Which of the following Community Paramedicine (CP) and/or Mobile Integrated Health (MIH) service lines does your agency currently provide? (Select all that apply.)

Options: Alternative destination transport · Chronic disease management · High-frequency utilizer management · Home visits · Mental health · Post-hospital follow-up · SUD management

Fields: Other (please specify)

Shown if Q42 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

51 How are your MIH/Access-to-Care services funded? (Select all that apply.)

Options: Coordinated Opioid Recovery (CORE) program · County/municipal funds (apart from your agency's budget) · Fee-for-service · Grant funding · Opioid settlement funds · Population health contracts (insurance/hospital/hospice/FQHC/government agency) · Value-based contracts (insurance/hospital/hospice/FQHC/government agency)

Fields: Other

Shown if Q42 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

52 Which of the following outcomes does your MIH program track? (Select all that apply.)

Options: 30-day hospital readmissions · Cost savings · Emergency department utilization · Patient outcomes · Patient satisfaction scores · Unscheduled EMS use · None of the above

Fields: Other

Shown if Q42 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

53 How often does your program review its MIH or access-to-care data?

Options: Monthly · Quarterly · Annually · Never

Fields: Other

Shown if Q42 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

54 Which tools does your agency use to coordinate care? (Select all that apply.)

Options: Case conferences · Direct communication (phone/text/email) · Health information exchange, · PCR-based coordination · None

Shown if Q42 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

55 Please rate your level of integration with the following community healthcare partners:

	Not at all	Minimal	Moderate	Full
Federally qualified health centers	○	○	○	○
Hospital systems	○	○	○	○
Mental health providers	○	○	○	○
Public health programs	○	○	○	○
Recovery oriented providers	○	○	○	○
Social services	○	○	○	○

Shown if Q42 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

56 Which vulnerable populations does your MIH or access-to-care program serve? (Select all that apply.)

Options: Chronic disease (including SUD, diabetes, cardiac conditions, HIV/AIDS, mental health disorders, etc.) · Homeless or housing insecure · Low-income · Mental health · Older adult (≥ 65 years) · Rural communities · SUD · No specific focus populations

Fields: Other

57 Does your agency use telehealth (video/phone) for triage, treatment, or referral?

Options: Yes · No

Thank you for completing the "Community Paramedicine/Mobile Integrated Health" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

PUBLIC INFORMATION, EDUCATION, AND RELATIONS (PIER)

Public Information, Education, and Relations (PIER)

58 Does your agency have a Public Information Officer (PIO)?

Options: Yes · No · Unsure

Shown if Q58 = Yes

59 Please provide the contact information for your agency's Public Information Officer (PIO).

Fields: Name · Title · Email address · Phone number

60 Does your agency use customer input, such as customer satisfaction surveys?

Options: Yes · No

Shown if Q60 = No

61 Would you like more information about using customer input, such as customer satisfaction surveys?

Options: Yes · No

Shown if Q60 = Yes

62 Please specify what method(s) your agency uses to collect customer satisfaction surveys. *[text entry]*

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

63 Does your agency participate in any group-focused community risk reduction, injury prevention, or community health promotion efforts?

Options: Yes · No

Shown if Q63 = No; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

64 Would you like more information about your agency participating in group-focused community risk reduction, injury prevention, or community health promotion efforts?

Options: Yes · No

Shown if Q63 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

65 Which of the following group-focused community risk reduction, injury prevention, or community health promotion efforts does your agency participate in? (Select all that apply.)

Options: Community CPR/First aid/Stop the bleed · Drowning prevention · Falls prevention · Motor vehicle safety (e.g., bicycle, motorcycle, seat belt, car seat, distracted drivers) · Opioid use

Fields: Other

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

66 Does your agency participate in any pediatric-specific community risk reduction or prevention activities?

Options: Yes · No

Shown if Q66 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

67 Please specify what pediatric-specific community risk reduction or prevention activities your agency participates in. *[text entry]*

Shown if Q66 = No; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

68 Would you like more information on your agency participating in pediatric-specific community risk reduction or prevention activities?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

69 Does your agency have a leave-behind program that distributes naloxone (Narcan®) or similar resources to individuals in need or at-risk?

Options: Yes · No

Shown if Q69 = No; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

70 Would you like more information about the naloxone (Narcan®) leave-behind programs?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground interfacility transport only / Ground 9-1-1 response and ground interfacility transport

71 Which of the following programs does your agency use to promote EMS careers to young adults? (Select all that apply.)

Options: Cadets · Explorers · High school academy program · None of the above

Fields: Other

Thank you for completing the "Public Information, Education, and Relations (PIER)" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

EMS DATA AND QUALITY IMPROVEMENT

EMS Data and Quality Improvement

72 Please provide the contact information for your agency's designated point of contact who is responsible for managing EMS data.

Fields: Name · Title · Email address · Phone number

73 Please provide the contact information for your agency's designated point of contact who is responsible for Quality Improvement/Performance Improvement (QI/PI).

Fields: Name · Title · Email address · Phone number

74 Does your agency have a written Quality Assurance/Quality Improvement (QA/QI) program?

Options: Yes · No

75 Which of the following ePCR software products/vendors does your agency utilize? (Select all that apply.)

Options: AIM EMS software · CloudPCR (Unified Solutions) · Emergency-Pro (Documed Systems) · Emergency Reporting (ESO solutions) · emsCharts (ZOLL Data Systems) · ESO EHR (ESO Solutions) · FireWorks (EPR Systems) · First Due · First Watch · Golden Hour (ZOLL Data Systems) · HealthEMS (Sansio) · ImageTrend · iPCR · MediView (beyond Lucid Technologies) · MedicWorks (EPR Systems) · MetroPCR · Prestige ePCR (Elevos) · RescueNet (ZOLL Data Systems) · Traumasoft · TripTix (Intermedix Corporation)

Fields: Other

76 How satisfied are you with your agency's ePCR system in supporting quality improvement efforts?

Options: Extremely satisfied · Somewhat satisfied · Somewhat dissatisfied · Extremely dissatisfied

77 Does your agency use EMSTARS v.3.5.1?

Options: Yes · No

Shown if Q77 = No

78 Does your agency plan to transition to EMSTARS v.3.5.1?

Options: Yes · No

Shown if Q78 = Yes

79 What is your agency's planned timeline for transitioning to EMSTARS v.3.5.1?

Options: Q2 2026 · Q3 2026 · Q4 2026 · After Q4 2026

80 Does your agency utilize biospatial?

Options: Yes · No

Shown if Q80 = Yes

81 In which of the following manner(s) does your agency utilize biospatial? (Select all that apply.)

Options: General reporting needs · Quality measures · Scheduled reports · Syndromic reports

Fields: Other

Shown if Q80 = No

82 Would you like someone from the Florida Department of Health to contact you to provide assistance or training on biospatial?

Options: Yes · No

83 Does your agency participate in collaborative programs with your county health department to bi-directionally exchange bio-surveillance data to identify emerging health threats?

Options: Yes · No · Unsure

84 Does your agency routinely exchange electronic patient-related data with your receiving hospitals?

Options: Yes · No

85 Does your agency participate in the Florida Health Information Exchange (Florida HIE) ?

Options: Yes · No

Shown if Q85 = No

86 Would you like more information about the Florida Health Information Exchange (Florida HIE)?

Options: Yes · No

87 Are the following statements applicable to the key performance metrics used by your agency to measure and ensure quality?

	Yes	No
Agency performance is transparent throughout my agency and shared with all employees	○	○
All employees from entry level to executive leadership understand how their performance fits into the goals of the agency	○	○
All performance measures can be tracked to strategies that are articulated in our mission and vision	○	○
Appropriate incentives reinforce and drive performance against performance measurements	○	○
Performance measurement is tied directly to training development	○	○
Performance measurement is tracked between groups (e.g. shifts or field staff and administrative personnel)	○	○
Performance measurement is tracked by individual employee(s)	○	○

Thank you for completing the "EMS Data and Quality Improvement" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

TELECOMMUNICATIONS

Telecommunications

88 Please provide the contact information for your agency's PSAP representative.

Fields: Name · Title · Email address · Phone number

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

89 Does your agency's dispatch center capture data on DA-CPR/T-CPR?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

90 Does your agency's dispatch center provide Telecommunicator CPR (T-CPR) or Dispatch-Assisted CPR (DA-CPR) instructions?

Options: Yes · No

Shown if Q90 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

91 What is your reporting status for DA-CPR/T-CPR data to the state?

Options: We are currently reporting. · We are capable of reporting, but are not doing so at this time. · We are not capable of reporting.

Shown if Q91 = We are currently reporting.; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

92 Please provide the name of the software/method you are using to report DA-CPR/T-CPR data to the state. *[text entry]*

93 For your agency's dispatch center, please provide the number of currently employed staff whose tenure falls within each of the following categories:

Fields: < 2 years · 2-5 years · 5-7 years · 7-10 years · 10-15 years · 15+ years

94 Please indicate the number of staff who separated from your agency in the past 12 months for each of the following reasons:

Fields: Retirement · Other reason (non-retirement)

95 Does your agency conduct exit interviews with departing staff?

Options: Yes · No

Shown if Q95 = Yes

96 Based on exit interviews or other available information, what are the primary reasons staff leave your dispatch center? (Select all that apply.)

Options: Burnout / stress · Career change · Leadership / supervision · Low pay / compensation · Retirement · Work schedule · Workplace culture

Fields: Other (please specify)

Thank you for completing the "Telecommunications" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

EMERGENCY/DISASTER PREPAREDNESS

Emergency/Disaster Preparedness

97 Please provide contact information for your agency's designated point of contact who is responsible for Disaster Preparedness.

Fields: Name · Title · Email address · Phone number

98 Does your agency participate with any health care coalitions?

Options: Yes · No

Shown if Q98 = Yes

99 Which of the following health care coalitions does your agency participate with? (Please select all that apply.)

Options: Region 1: Emerald Coast Healthcare Coalition · Region 2: Big Bend Healthcare Coalition (BBHCC) · Region 3: Northeast Florida Healthcare Coalition (NEFLHCC) · Region 3: North Central Florida Healthcare Coalition (NCFHCC) · Region 3: Coalition for Health and Medical Preparedness (CHAMP) · Region 4: Tampa Bay Health & Medical Preparedness Coalition · Region 5: Central Florida Disaster Medical Coalition · Region 6: Southwest Florida Healthcare Coalition · Region 7: Palm Beach County Healthcare Emergency Response Coalition (HERC) · Region 7: Broward County Healthcare Coalition (BCHC) · Region 7: Miami-Dade County Healthcare Preparedness Coalition (MDCHPC) · Region 7: Keys Health Ready Coalition

Fields: Other

Shown if Q98 = No

100 Would you like more information about health care coalitions?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

101 Has your agency adopted a protocol and provided training to manage an active assailant event and/or violent/hostile incident?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

102 Does your agency currently provide ballistic protection for your first responders?

Options: Yes · No

Shown if Q102 = No; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

103 Do your agency plan to purchase ballistic protection for your first responders in the next 12 to 24 months?

Options: Yes · No

Shown if Q103 = No; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

104 Would you like more information on providing ballistic protection for your first responders?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

105 Does your agency have written protocols for hemorrhage control at mass casualty incidents (MCIs)?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

106 Has your agency established specialized kits with supplies for hemorrhage control at mass casualty incidents (MCIs)?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

107 Does your agency currently have policies regarding entering "warm zones" during an Active Shooter Hostile Event Response (ASHER) (e.g., Rescue Task Force (RTF))?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport

108 Does your agency currently have designated entry/extraction teams that train together with law enforcement?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

109 Does your agency conduct hemorrhage control (e.g., Stop the Bleed™) training for community partners (e.g., schools, churches, civic groups, private industry)?

Options: Yes · No

Shown if Q109 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

110 Please indicate the estimated number of individual community participants that have taken hemorrhage control training courses performed by your agency in the previous 12 months. *[text entry]*

Shown if Q109 = No; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

111 What are the barriers preventing your agency from offering hemorrhage control training in your community? (Select all that apply.)

Options: Availability/cost of bleed control kits · Availability/cost of qualified staff to perform the training · Availability/cost of training materials · Lack of demand for training in the community · Providing hemorrhage control training is not mandated by statute or rule · Training is not supported by local government entities

Fields: Other

Shown if Q109 = Yes; and Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

112 What are the barriers preventing your agency from expanding hemorrhage control training in your community? (Select all that apply.)

Options: Availability/cost of bleed control kits · Availability/cost of qualified staff to perform the training · Availability/cost of training materials · Lack of demand for training in the community · Providing hemorrhage control training is not mandated by statute or rule · Training is not supported by local government entities

Fields: Other

113 Has your agency adopted a protocol to care for highly infectious disease patients?

Options: Yes · No

Shown if Q113 = Yes

114 Has your agency provided training to care for highly infectious disease patients?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport

115 Does your agency have a written agreement with your county health department to provide immunization or public health countermeasure programs?

Options: Yes · No

116 Does your agency utilize FirstNet® for voice and data communications?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

117 Does your agency's MCI procedure include pediatric specific information?

Options: Yes · No

Shown if Q3 = 9-1-1 response with ground transport / 9-1-1 response without ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport

118 What triage method does your agency use to triage pediatrics in MCI?

Options: JumpSTART · RAMP · SALT

Fields: Other (please specify)

Thank you for completing the "Emergency/Disaster Preparedness" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

EMS FOR CHILDREN

EMS for Children

119 A Prehospital Pediatric Emergency Care Coordinator or Champion, also known as a PECC, is an agency-designated liaison who champions pediatric emergency care in the prehospital setting. A prehospital PECC does not have to be an individual dedicated solely to the PECC role. It can be an EMS chief, training officer, EMT, paramedic, or medical director. PECCs have been shown to improve pediatric care and decrease morbidity and mortality. Does your agency have a Pediatric Emergency Care Coordinator or Champion (PECC)?

Options: Yes · No · Unsure

Shown if Q119 = Yes

120 Please provide the contact information for your agency's Pediatric Emergency Care Coordinator or Champion (PECC).

Fields: Name · Title · Email address · Phone number

Shown if Q3 = 9-1-1 response with ground transport / Ground 9-1-1 response and ground interfacility transport / Air rotor-wing 9-1-1 response only / Air rotor-wing 9-1-1 response and rotor-wing interfacility transport / Air rotor-wing and ground interfacility transport / Air fixed-wing interfacility transport only / Air fixed-wing and ground interfacility transport

121 Does your agency transport pediatric and/or neonatal patients?

Options: Yes · No

Skip To: End of Block If Does your agency transport pediatric and/or neonatal patients? = No

Shown if Q121 = Yes

122 Which of the following device(s) does your agency use to transport pediatric patients? (Select all that apply.)

Options: Agency car seat · Pediatric car seat · Pedi-Mate® Pediatric Restraint System (10-100 lbs. or 4.5-45.4 kg.) or similar device · Neomate® Pediatric Restraint System (5-14 lbs. or 2.3-6.4 kg.) or similar device · KangooFix® Neonatal Restraint System (3.5-11.1 lbs.) or similar device · Isolette® · None of the above

Fields: Other

123 Does your agency conduct or participate in programs to reduce infant mortality (e.g., safe sleep programs, maternal health programs, etc.)? (NOTE: Infant is defined as ≤ 12 months of age.)

Options: Yes · No

124 Do you perceive any barriers to participating in programs to reduce infant mortality?

Options: Yes · No

Shown if Q124 = Yes

125 Which of the following identifies the primary barriers that your agency experiences with participation in programs to reduce infant mortality? (Select all that apply.)

Options: Challenges in sustaining long-term efforts · Cultural and linguistic barriers · Geographic barriers in service delivery · Inconsistent training among staff · Insufficient staffing · Lack of community engagement · Limited access to reliable data · Limited awareness of existing programs · Limited funding · Policy and regulatory constraints

Fields: Other

126 Do you perceive any facilitators that support your agency's participation in programs aimed at reducing infant mortality?

Options: Yes · No

Shown if Q126 = Yes

127 Which of the following identifies the primary facilitators that your agency experiences with participation in programs to reduce infant mortality? (Select all that apply.)

Options: Access to funding · Community partnerships · Cultural competency · Data and analytics · Evidence-based practices · Policy support · Public awareness campaigns · Training and education

Fields: Other

Shown if Q119 = No / Unsure

128 Which of the following describes your agency's barriers to identifying a PECC? (Select all that apply.)

Options: Agency has other priorities · Buy-in from leadership · Funding · Staffing limitations · Time · Unsure what the duties of a PECC entail

Fields: Other

129 Which of the following systems does your agency use to determine age and weight-based pediatric medication dosing and equipment size selection?

Options: Broselow Resuscitation Tape® · Handtevy Pediatric Emergency Standards System® · Pedi-Sleeve Pediatric Dosing System® · Local agency protocol · None of the above

Fields: Other

130 Does your agency incorporate pediatrics and/or neonatal initiatives into your existing quality improvement (QI) programs?

Options: Yes · No · Unsure

Shown if Q130 = Yes

131 Please identify your agency's ongoing pediatric quality improvement (QI) initiatives. (Select all that apply.)

Options: Track specific pediatric outcomes (e.g., on scene times, survival rates after cardiac arrest, hospital disposition, etc.) · Review pediatric and neonatal transport charts and documentation · None of the above

Fields: Other

Thank you for completing the "EMS for Children" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

TRAUMA PATIENTS

Trauma patients

132 For patients with traumatic injuries, does your agency administer prehospital tranexamic acid (TXA)?

Options: Yes · No

Shown if Q132 = Yes

133 Which of the following criteria is used for patient selection for prehospital tranexamic acid (TXA) in trauma cases? (Select all that apply.)

Options: Glasgow Coma Scale (GCS) < 13 (before any sedation administration) · Systolic blood pressure (SBP) < 90 mm Hg · Heart rate > 110 beats per minute

Fields: Other

Shown if Q132 = Yes

134 What is your agency's standard prehospital tranexamic acid (TXA) dosage?

Options: 1 g bolus · 1 g bolus followed by 1 g infusion · 2 g bolus

Fields: Other

135 Does your agency administer prehospital blood transfusion for trauma patients?

Options: Yes · No

Shown if Q135 = Yes

136 What are your agency's criteria for initiating prehospital transfusion in trauma cases? (Select all that apply.)

Options: Systolic blood pressure (SBP) < 70 mmHg · SBP < 90 mmHg with heart rate ≥ 110 beats per minute · Penetrating injury

Fields: Other

Shown if Q135 = Yes

137 What blood component does your agency use for prehospital transfusion in trauma cases? (Select all that apply.)

Options: Fresh frozen plasma (FFP) · Packed red blood cells (PRBC) · Whole blood

Fields: Other

138 Does your agency follow any specific motorcycle-related trauma transport protocols (not counting paramedic judgement or state scorecard criteria)?

Options: Yes · No

139 Does your agency utilize the Medical Care committee's suggested trauma pit crew format to help decrease scene time?

Options: Yes · No

Shown if Q139 = No

140 Please explain why your agency does not utilize the medical care committee's suggested trauma pit crew format. *[text entry]*

141 Does your agency measure oxygen saturation (SpO2) before and after airway interventions?

Options: Yes · No

142 Does your agency measure the End-Tidal Carbon Dioxide (EtCO2) before and after airway interventions?

Options: Yes · No

Shown if Q142 = No

143 Please explain why your agency does not measure the End-Tidal Carbon Dioxide (EtCO2) before and after airway interventions. *[text entry]*

144 Does your agency utilize pelvic binders for trauma patients with pelvic instability?

Options: Yes · No

Shown if Q144 = No

145 Please list the reasons why your agency chooses not to utilize pelvic binders for trauma patients with pelvic instability. *[text entry]*

146 Does your agency administer antibiotics for open fractures on the scene or during transport?

Options: Yes · No

147 In what year did your agency first implement the use of tourniquets for bleeding control? (Please enter a 4-digit year.) *[text entry]*

Thank you for completing the "Trauma Patients" module. You may now exit the survey (close browser). If you are completing another module, please select the continue button.

COMPLETION

Once all modules are completed, please click the button below to submit the survey.

Appendix B — Supplemental Tables

Table 45 *Year-over-year response, full per-question detail (carried-forward, 1:1, content)*

2026 Q#	2026 question (condensed)	2026 committee	2025 Q#	2025 rate	2026 rate	2026 higher
Q3	Primary type of service	General & Medical Direction	6	1.000	1.000	No
Q6	Organizational tax status	General & Medical Direction	4	1.000	1.000	No
Q7	Frontline ground vehicles staffed (minimum)	General & Medical Direction	8	0.764	0.783	Yes
Q9	EMT/paramedic shortage (Y/N)	General & Medical Direction	10	0.992	1.000	Yes
Q10	EMT positions (budgeted/vacant)	General & Medical Direction	11	0.961	0.552	No
Q11	Paramedic positions (budgeted/vacant)	General & Medical Direction	12	0.961	0.943	No
Q12	Medical director paid/volunteer	General & Medical Direction	19	0.992	0.996	Yes
Q13	Medical director full-time/part-time	General & Medical Direction	20	0.992	0.996	Yes
Q15	FTE counts (EMTs, paramedics, medical directors)	General & Medical Direction	22	0.981	0.983	Yes
Q18	Human resources practice benchmarks	Agency Workforce	16	0.849	0.948	Yes
Q22	Pit crew approach for time-sensitive diagnoses	Medical Care	24	0.691	0.678	No
Q23	Stroke recognition barriers	Medical Care	25	0.181	0.222	Yes
Q24	Stroke awareness program participation	Medical Care	26	0.784	0.817	Yes
Q27	Stroke coalition participation	Medical Care	29	0.776	0.809	Yes
Q30	Heads-up CPR / impedance threshold device bundle	Medical Care	32	0.988	0.996	Yes
Q33	Motorcycle-related trauma transport protocols	Medical Care	185	0.969	0.996	Yes
Q35	TIM training access	Mental Health, Safety & Wellness	36	0.363	0.787	Yes
Q37	Top program development challenges (select 3)	Mental Health, Safety & Wellness	39	0.857	0.961	Yes
Q38	BH curriculum used	Mental Health, Safety & Wellness	46	0.761	0.965	Yes
Q39	3-hour behavioral health suicide prevention access	Mental Health, Safety & Wellness	50	0.992	0.983	No

2026 Q#	2026 question (condensed)	2026 committee	2025 Q#	2025 rate	2026 rate	2026 higher
Q40	Behavioral health help-seeking policies	Mental Health, Safety & Wellness	54	0.992	0.991	No
Q41	Sufficient local MH providers (Y/N)	Mental Health, Safety & Wellness	63	0.992	0.987	No
Q42	MIH/CP services provided (Y/N)	Community Paramedicine / MIH	78	0.888	0.935	Yes
Q44	Written agreement with county health dept – immunizations	Community Paramedicine / MIH	164	0.741	0.926	Yes
Q45	SUD transport to non-hospital centers	Community Paramedicine / MIH	69	0.541	0.570	Yes
Q46	Transport to non-hospital SUD specialty centers	Community Paramedicine / MIH	69	0.541	0.570	Yes
Q47	SUD care coordination	Community Paramedicine / MIH	72	0.541	0.565	Yes
Q48	Buprenorphine / MAT provision	Community Paramedicine / MIH	75	0.784	0.817	Yes
Q58	PIO existence	PIER	101	0.988	0.935	No
Q60	Customer input use (satisfaction surveys)	PIER	103	0.992	0.987	No
Q63	Community risk reduction / injury prevention programs	PIER	106	0.892	0.935	Yes
Q66	Pediatric-specific prevention activities	PIER	109	0.884	0.935	Yes
Q69	Naloxone leave-behind program	PIER	112	0.900	0.935	Yes
Q74	Written QA/QI program	EMS Data & QI	116	0.985	0.987	Yes
Q75	ePCR software/vendor	EMS Data & QI	118	0.973	0.983	Yes
Q76	ePCR satisfaction (QI support)	EMS Data & QI	119	0.973	0.987	Yes
Q83	Bio-surveillance data exchange with county health dept	EMS Data & QI	126	0.973	0.709	No
Q84	Electronic data exchange with receiving hospitals	EMS Data & QI	127	0.977	0.991	Yes
Q85	Florida HIE participation	EMS Data & QI	129	0.942	0.970	Yes
Q87	QI performance metrics (matrix)	EMS Data & QI	131	0.961	0.991	Yes
Q89	Stroke screening tool at dispatch	Telecommunications	134	0.745	0.765	Yes
Q90	DA-CPR / T-CPR provision	Telecommunications	139	0.664	0.765	Yes
Q98	Healthcare coalition participation	Emergency/Disaster Preparedness	147	0.919	0.970	Yes
Q101	Active assailant protocol and training	Emergency/Disaster Preparedness	150	0.768	0.813	Yes
Q102	Ballistic protection provision	Emergency/Disaster Preparedness	151	0.772	0.813	Yes

2026 Q#	2026 question (condensed)	2026 committee	2025 Q#	2025 rate	2026 rate	2026 higher
Q106	Hemorrhage-control kits for MCIs	Emergency/Disaster Preparedness	155	0.764	0.809	Yes
Q107	Warm zone / ASHER policies	Emergency/Disaster Preparedness	156	0.764	0.809	Yes
Q108	Law enforcement joint training teams	Emergency/Disaster Preparedness	157	0.768	0.787	Yes
Q109	Community hemorrhage control (Stop the Bleed) training	Emergency/Disaster Preparedness	158	0.768	0.804	Yes
Q115	County health dept immunization/countermeasure agreement	Emergency/Disaster Preparedness	164	0.741	0.774	Yes
Q116	FirstNet use	Emergency/Disaster Preparedness	165	0.954	0.974	Yes
Q119	PECC designation (with definition)	EMS for Children	173	0.730	0.878	Yes
Q121	Pediatric/neonatal transport	EMS for Children	166	0.985	0.622	No
Q123	Infant mortality programs	EMS for Children	168	0.722	0.970	Yes
Q124	Perceived barriers to infant-mortality programs	EMS for Children	169	0.722	0.970	Yes
Q126	Perceived facilitators for infant-mortality programs	EMS for Children	171	0.722	0.948	Yes
Q129	Pediatric med dosing / equipment system	EMS for Children	176	0.718	0.961	Yes
Q132	Prehospital TXA administration	Trauma Patients	179	0.965	0.991	Yes
Q135	Prehospital blood transfusion (trauma)	Trauma Patients	182	0.973	0.996	Yes
Q139	Trauma pit crew format use	Trauma Patients	187	0.958	0.991	Yes
Q141	SpO_2 measurement before/after airway interventions	Trauma Patients	189	0.977	0.996	Yes
Q142	$EtCO_2$ measurement before/after airway interventions	Trauma Patients	191	0.977	0.996	Yes
Q144	Pelvic binders for pelvic instability	Trauma Patients	193	0.961	0.996	Yes
Q146	Antibiotics for open fractures (scene/transport)	Trauma Patients	195	0.965	0.991	Yes
Q147	Year of first tourniquet implementation	Trauma Patients	197	0.842	0.900	Yes

Table 46 *Agency roster by 2025 call-volume cohort*

Agency name	County	BEMO Region
Cohort 1 | ≤175 annual calls		
Leopard Transportation of Central Florida LLC.	Lake	Northeast
Ponce Inlet Fire Rescue	Volusia	Northeast
Navarre Beach Fire Rescue District	Santa Rosa	Panhandle
HCA Florida Palms West	Palm Beach	Southeast
Titan International Security Services	Palm Beach	Southeast
City of Sebring Fire Department	Highlands	Southwest
Cohort 2 | 176–2,117 annual calls		
City of Madeira Beach	Pinellas	Central
City of New Port Richey Fire Department	Pasco	Central
City of South Pasadena	Pinellas	Central
High Springs Fire Department	Alachua	Central
Johns Hopkins All Children's	Pinellas	Central
Newberry Fire Department	Alachua	Central
Cape Canaveral Volunteer Fire Department, Inc	Brevard	Northeast
City of Edgewater Fire Rescue	Volusia	Northeast
Daytona Beach Shores Department of Public Safety	Volusia	Northeast
Liberty Ambulance Service, Inc.	Duval	Northeast
New Smyrna Beach Fire Department	Volusia	Northeast
Satellite Beach Fire Department	Brevard	Northeast
South Daytona Fire Rescue	Volusia	Northeast
Excelsior Ambulance Service, Inc.	Out of State	Out of State
Survival Flight EMS, LLC	Out of State	Out of State
Columbia County Fire Rescue	Columbia	Panhandle
Holley-Navarre Fire District	Santa Rosa	Panhandle
Lafayette County Rescue	Lafayette	Panhandle
Legacy of N. FL. Inc	Columbia	Panhandle
Liberty County Ambulance	Liberty	Panhandle
Pace Fire Rescue District	Santa Rosa	Panhandle
Weems Hospital Ambulance Service	Franklin	Panhandle
East Coast Ambulance, LLC	Indian River	Southeast
Elite Medical Response, LLC	Monroe	Southeast
HCA Florida Lawnwood Hospital	St. Lucie	Southeast
Indian River Shores, Department of Public Safety	Indian River	Southeast
Islamorada Village of Islands Fire Rescue	Monroe	Southeast
Key Largo Volunteer Ambulance Corps., Inc.	Monroe	Southeast
Lighthouse Point Fire Rescue, City of	Broward	Southeast
Ocean Reef Public Safety Department	Monroe	Southeast
Town of Palm Beach Fire Rescue	Palm Beach	Southeast

Agency name	County	BEMO Region
Village of Key Biscayne Fire Rescue	Miami-Dade	Southeast
Village of North Palm Beach Fire Rescue	Palm Beach	Southeast
Village of Tequesta Fire Rescue	Palm Beach	Southeast
Cedar Hammock Fire Rescue District	Manatee	Southwest
Glades County EMS	Glades	Southwest
Golisano Children's Hospital of SW Florida	Lee	Southwest
Hardee County Fire Rescue	Hardee	Southwest
Longboat Key Fire Rescue	Manatee	Southwest
Matlacha/Pine Island Fire Control District	Lee	Southwest
Punta Gorda, City of	Charlotte	Southwest
Sanibel Fire Rescue District	Lee	Southwest
Southern Manatee Fire & Rescue District	Manatee	Southwest
West Manatee Fire and Rescue District	Manatee	Southwest
Cohort 3 | 2,118–8,255 annual calls		
City of Gulfport	Pinellas	Central
City of Safety Harbor	Pinellas	Central
City of Tarpon Springs	Pinellas	Central
Pinellas Suncoast Fire & Rescue District	Pinellas	Central
Plant City Fire Rescue	Hillsborough	Central
Temple Terrace Fire Department	Hillsborough	Central
City of Deltona Fire Department	Volusia	Northeast
City of Ocoee Fire Department	Orange	Northeast
City of Ormond Beach	Volusia	Northeast
Cocoa Beach Fire Department	Brevard	Northeast
Deland Fire Department	Volusia	Northeast
Fernandina Beach Fire Department	Nassau	Northeast
Greater Orlando Aviation Authority	Orange	Northeast
Kindred Care EMS	Duval	Northeast
Lake Mary Fire Department	Seminole	Northeast
Longwood Fire Department	Seminole	Northeast
Maitland Fire Rescue Department	Orange	Northeast
Mayo Clinic Jacksonville Medical Transport	Duval	Northeast
Nassau County Fire Rescue Service	Nassau	Northeast
Orange City Fire Department	Volusia	Northeast
Orange Park Medical Center Inc. d/b/a HCA FL Hospital Orange Park	Clay	Northeast
Oviedo Fire Department	Seminole	Northeast
Palm Bay Fire Department, City of	Brevard	Northeast
Port Orange Department of Fire Rescue	Volusia	Northeast
Rockledge Fire Department, City of	Brevard	Northeast
Titusville Fire Department, City of	Brevard	Northeast

Agency name	County	BEMO Region
Winter Garden Fire Rescue Department	Orange	Northeast
Winter Park Fire Rescue	Orange	Northeast
Baker County Fire Rescue	Baker	Panhandle
Bradford County Fire Rescue	Bradford	Panhandle
Calhoun Liberty Hospital Association	Calhoun	Panhandle
Capital Regional Medical Center Emergency Transport Team	Leon	Panhandle
County of Walton, Office of Sheriff d/b/a Walton County Fire Rescue	Walton	Panhandle
Dixie County Emergency Medical Services	Dixie	Panhandle
Gulf Coast Hospital EMS	Bay	Panhandle
Gulf County Emergency Medical Services	Gulf	Panhandle
Hamilton County Ambulance Service	Hamilton	Panhandle
Holmes County EMS	Holmes	Panhandle
Jefferson County Fire/Rescue Service	Jefferson	Panhandle
Madison County Fire Rescue	Madison	Panhandle
South Walton Fire District	Walton	Panhandle
Suwannee County Fire Rescue	Suwannee	Panhandle
Tallahassee Memorial Healthcare, Inc.	Leon	Panhandle
Union County Department of Emergency Services	Union	Panhandle
Washington County Ambulance Service	Washington	Panhandle
City of Greenacres	Palm Beach	Southeast
City of Key West Fire Department	Monroe	Southeast
City of Riviera Beach	Palm Beach	Southeast
City of Stuart Fire Rescue	Martin	Southeast
Coconut Creek Fire Rescue	Broward	Southeast
Margate Fire Rescue	Broward	Southeast
Monroe County Fire Rescue	Monroe	Southeast
North Lauderdale Fire Rescue	Broward	Southeast
Oakland Park Fire Rescue Department	Broward	Southeast
Plantation Fire Department, City of	Broward	Southeast
Rapid Response Medical Transportation	Broward	Southeast
Seminole Tribe Fire Rescue	Broward	Southeast
Tamarac Fire Rescue, City of	Broward	Southeast
Universal Protection Service, LLC	Palm Beach	Southeast
Bonita Springs Fire Control & Rescue	Lee	Southwest
Desoto County Fire/Rescue Department	DeSoto	Southwest
Englewood Area Fire Control District	Sarasota	Southwest
Estero Fire Rescue	Lee	Southwest
Hendry County Emergency Services	Hendry	Southwest
Iona McGregor Fire District	Lee	Southwest
North River Fire District	Manatee	Southwest

Agency name	County	BEMO Region
Positive Mobility, Inc. d/b/a Positive Medical Transport, Inc.	Highlands	Southwest
San Carlos Park Fire Protection & Rescue Service District	Lee	Southwest
South Trail Fire Protection & Rescue Service District	Lee	Southwest
Venice Fire Department	Sarasota	Southwest
West Coast-Southern Medical Services., Inc.	Manatee	Southwest
Cohort 4 | 8,256–34,145 annual calls		
Adventhealth Wesley Chapel	Pasco	Central
Citrus County Fire Rescue	Citrus	Central
City of Clearwater	Pinellas	Central
City of Pinellas Park	Pinellas	Central
City of Seminole	Pinellas	Central
Crisis Center of Tampa Bay Inc. d/b/a Transcare Medical Transport	Hillsborough	Central
Gainesville Fire Rescue	Alachua	Central
Go Logix, LLC	Hillsborough	Central
HCA Florida Ocala Hospital	Marion	Central
Hernando County Fire and Emergency Services	Hernando	Central
Shandscair, Shands Hospital	Alachua	Central
Sumter County Board of County Commissioners	Sumter	Central
Village Center Community Development District	Sumter	Central
City of Apopka Fire Department	Orange	Northeast
Coastal Health Systems of Brevard, Inc.	Brevard	Northeast
District Fire Department	Orange	Northeast
First 2 Aid EMS Inc., d/b/a Trident EMS	Orange	Northeast
Flagler County Fire Rescue	Flagler	Northeast
Kissimmee Fire Department	Osceola	Northeast
Melbourne Fire Department	Brevard	Northeast
Osceola County Fire Rescue	Osceola	Northeast
St. Johns County Fire Rescue	St. Johns	Northeast
Bay County Fire Rescue	Bay	Panhandle
Jackson County Fire Rescue	Jackson	Panhandle
Lifeguard Ambulance Service of FL, LLC-Santa Rosa County	Santa Rosa	Panhandle
Tallahassee Fire Department	Leon	Panhandle
Atlantic/Palm Beach Ambulance, Inc. d/b/a AMR	Palm Beach	Southeast
Boca Raton Fire Rescue	Palm Beach	Southeast
Broward Ambulance, Inc., d/b/a AMR	Broward	Southeast
City of Delray Beach Fire Rescue	Palm Beach	Southeast
City of Hialeah Fire Rescue Department	Miami-Dade	Southeast
City of Miami Beach Fire Rescue Department	Miami-Dade	Southeast
City of West Palm Beach Fire Department	Palm Beach	Southeast
Coral Springs Fire Department, City of	Broward	Southeast

Agency name	County	BEMO Region
Davie Fire Rescue, the Town of	Broward	Southeast
Hollywood Fire Rescue & Beach Safety Department	Broward	Southeast
Miramar Fire Rescue, City of	Broward	Southeast
Palm Beach Gardens Fire Rescue	Palm Beach	Southeast
Pembroke Pines Fire Rescue	Broward	Southeast
Pompano Beach Fire Rescue	Broward	Southeast
Randle-Eastern Amb. Svc., Inc. d/b/a Medics Ambulance Svc.	Miami-Dade	Southeast
Randle-Eastern Ambulance Service, Inc., d/b/a AMR	Miami-Dade	Southeast
Cape Coral Fire Department	Lee	Southwest
Charlotte County Fire and EMS Department	Charlotte	Southwest
Greater Naples Fire Rescue District	Collier	Southwest
Lehigh Acres Fire Control and Rescue District	Lee	Southwest
North Collier Fire Control and Rescue District	Collier	Southwest
North Port Fire Rescue District	Sarasota	Southwest
Positive Mobility, Inc. d/b/a Elite Medical Response	Highlands	Southwest
Cohort 5 | >34,145 annual calls		
Alachua County Fire Rescue	Alachua	Central
City of St. Petersburg	Pinellas	Central
Hillsborough County Fire Rescue	Hillsborough	Central
Lifefleet Southeast Inc. d/b/a American Medical Response	Hillsborough	Central
Marion County Fire Rescue Service	Marion	Central
Medfleet, LLC	Pasco	Central
Pasco County Fire Rescue	Pasco	Central
Polk County Board of County Commissioners	Polk	Central
Adventhealth EMS	Orange	Northeast
Ameripro EMS of Florida, LLC	Duval	Northeast
Brevard County Fire Rescue	Brevard	Northeast
Clay County Fire Rescue	Clay	Northeast
County of Volusia	Volusia	Northeast
Jacksonville Fire and Rescue Department, City of	Duval	Northeast
Lake County Board of County Commissioners	Lake	Northeast
Orange County Fire Rescue Department	Orange	Northeast
Orlando Fire Department	Orange	Northeast
Seminole County Fire Department	Seminole	Northeast
Escambia County Public Safety Department	Escambia	Panhandle
Leon County Emergency Medical Services	Leon	Panhandle
Okaloosa County Department of Public Safety	Okaloosa	Panhandle
Miami Fire Rescue Department	Miami-Dade	Southeast
Miami-Dade County Fire Rescue Department	Miami-Dade	Southeast
National Health Transport, Inc.	Miami-Dade	Southeast

Agency name	County	BEMO Region
Palm Beach County Fire Rescue	Palm Beach	Southeast
St. Lucie County Fire District	St. Lucie	Southeast
The Sheriff of Broward County, Florida	Broward	Southeast
Collier County EMS Department	Collier	Southwest
Manatee County Department of Public Safety	Manatee	Southwest
Sarasota County Fire Department	Sarasota	Southwest

Appendix C — BEMO/FDEM EMS Regions

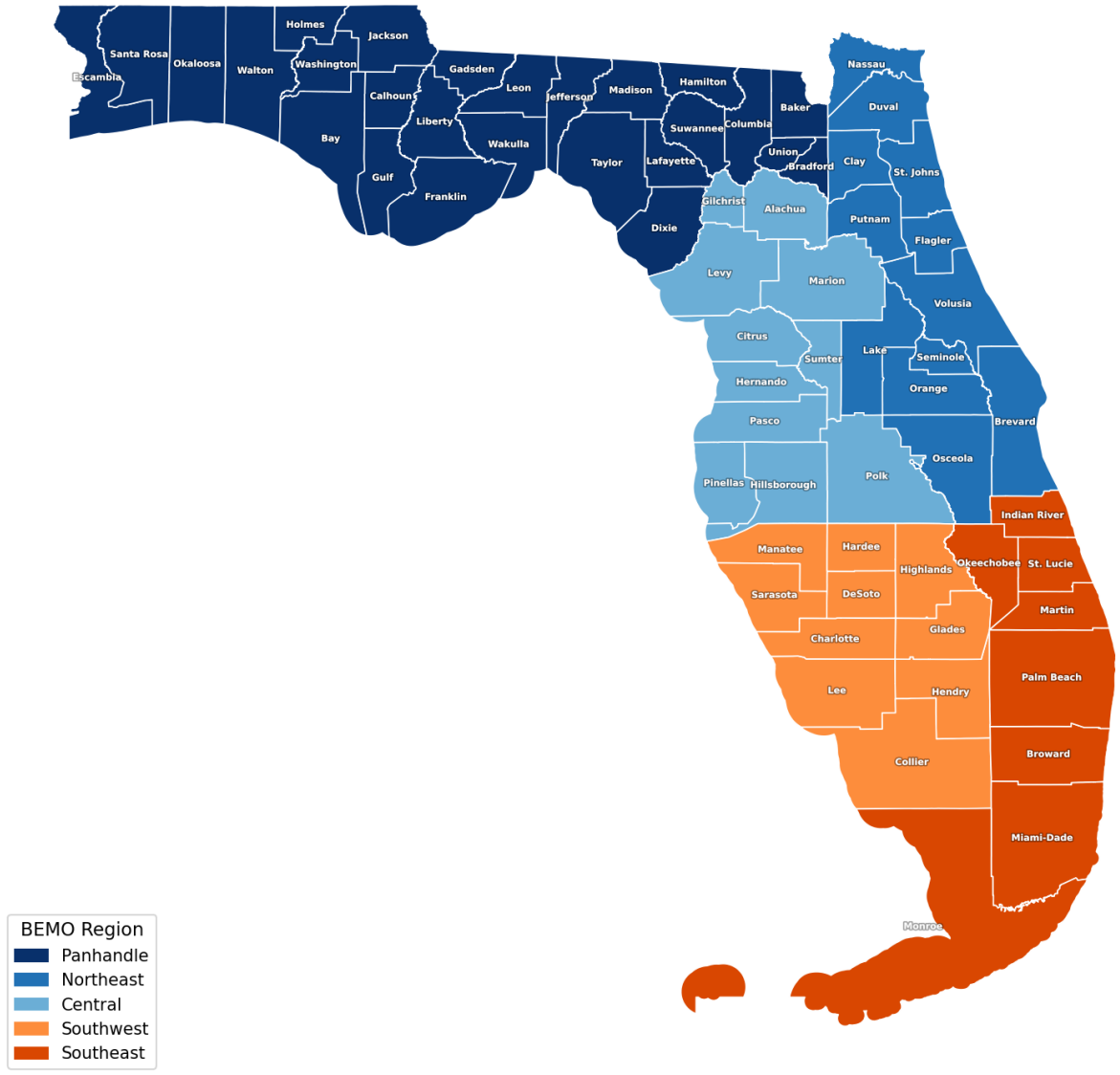

Figure 12 *Florida counties by Bureau of Emergency Medical Oversight (BEMO) region.*

Note: *The five regions (Panhandle, Northeast, Central, Southwest, and Southeast) comprise all 67 Florida counties and are used throughout this report for regional stratification. County boundaries are from the U.S. Census Bureau TIGER/Line 2023 shapefile; regional assignments are from the Florida Department of Health.*

Acronyms and Definitions

Abbreviation	Full Term / Definition
AHCA	Agency for Health Care Administration
ALS	Advanced Life Support
aOR	Adjusted Odds Ratio
ANOVA	Analysis of Variance
ASHER	Active Shooter Hostile Event Response
BEMO	Bureau of Emergency Medical Oversight
BH	Behavioral Health
BLS	Basic Life Support
CHD	County Health Department
CMS	Centers for Medicare & Medicaid Services
COVID-19	Coronavirus Disease 2019
CP	Community Paramedicine
CPR	Cardiopulmonary Resuscitation
CRM	Crew Resource Management
CRR	Community Risk Reduction
DA-CPR	Dispatcher-Assisted CPR
DOH	Department of Health
ED	Emergency Department
EMS	Emergency Medical Services
EMSAC	Florida EMS Advisory Council
EMSC	Emergency Medical Services for Children
EMSTARS	Florida Prehospital EMS Tracking and Reporting System
EMT	Emergency Medical Technician
ePCR	Electronic Patient Care Reporting
$EtCO_2$	End-Tidal Carbon Dioxide
ET3	Emergency Triage, Treat, and Transport
FDEM	Florida Division of Emergency Management
FDOH	Florida Department of Health
FL-CEMS	Florida Center for Emergency Medical Services
FQHC	Federally Qualified Health Center
FTE	Full-Time Equivalent
HIE	Health Information Exchange
HR	Human Resources
HRSA	Health Resources and Services Administration
IMR	Infant Mortality Rate
IQR	Interquartile Range
IT	Information Technology
JumpSTART	Pediatric adaptation of the START triage system
LR test	Likelihood Ratio test
LTOWB	Low-Titer Group O Whole Blood

Abbreviation	Full Term / Definition
MAT	Medication-Assisted Treatment
MCI	Mass Casualty Incident
MH	Mental Health
MIH	Mobile Integrated Health(care)
MIH/CP	Mobile Integrated Health(care)/Community paramedic(ine)
MPH	Master of Public Health
MQA	Florida DOH Division of Medical Quality Assurance
NAEMSP	National Association of EMS Physicians
NASEMSO	National Association of State EMS Officials
NEMSIS	National Emergency Medical Services Information System
PCR	Patient Care Report
PECC	Pediatric Emergency Care Coordinator
PHBT	Prehospital Blood Transfusion
PIER	Public Information, Education, and Relations
PII	Personally Identifiable Information
PIO	Public Information Officer
PSAP	Public Safety Answering Point
PTSD	Post-Traumatic Stress Disorder
QA	Quality Assurance
QI	Quality Improvement
RAMP	Rapid Assessment of Mentation and Pulse
SALT	Sort, Assess, Lifesaving Interventions, Treatment and/or Transport
SBP	Systolic Blood Pressure
SD	Standard Deviation
SpO_2	Peripheral capillary oxygen saturation
START	Simple Triage and Rapid Treatment
STEMI	ST-Elevation Myocardial Infarction
SUD	Substance Use Disorder
T-CPR	Telecommunicator CPR
THOR	Trauma Hemostasis and Oxygenation Research
TIGER	Topologically Integrated Geographic Encoding and Referencing
TIM	Traffic Incident Management
TQ	Tourniquet
TXA	Tranexamic Acid

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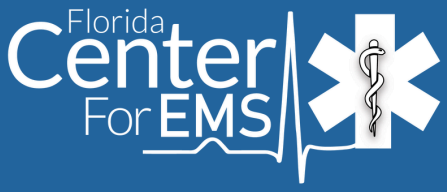

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