

# Summer 2019 PHDP Newsletter

Division of EMS &  
Highway Safety

## Reminders

- The [EMS Assistance Fund Grant \(FY 2020\)](#) application deadline is **July 29, 2019**. FY 2020 Grant Application can be found at [idphgrants.com](http://idphgrants.com).
- Ideas for newsletter content? Let [Adrienne Lefevre](#) know!

## Resources

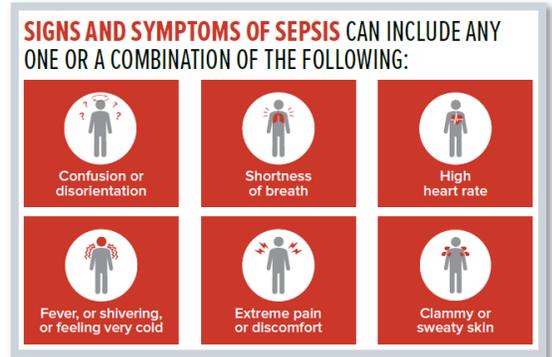
- [EMS Agenda 2050](#)
- [National EMS Scope of Practice Model 2019](#)
- [Illinois NEMSIS Specifications](#)
- [Sepsis Fact Sheet for EMS](#)
- [Sepsis: First Response Video](#)
- [Preventing Occupational Exposure \(Illicit Drugs\) Video](#)
- [Information on illicit drug hazards for first responders](#)

# PREHOSPITAL DATA PROGRAM

## Get Ahead of Sepsis!

As many as **87%** of sepsis cases originate in the patient's community. Sepsis is the body's life-threatening response to an infection that **takes 270,000 lives a year** in the United States alone. Learn more [here](#).

EMS are often the first medical providers to reach these cases. In fact, *EMS transports as many as 60% of patients with severe sepsis* arriving at the emergency department, yet many EMS providers are unaware of sepsis or what they should do if they suspect it. In response, Sepsis Alliance created [Sepsis: First Response](#), an educational video to prepare pre-hospital care providers to better identify and treat sepsis cases they encounter in the field. This video offers pre-hospital providers with the tools to **rapidly identify sepsis, begin treatment, and effectively coordinate** with the Emergency Department and in-hospital colleagues.



## CODE SEPSIS: Prevention in Action

*“Just maybe, we might be able to reverse the effects [of sepsis] and have a positive outcome [for our patient(s)].” – Dennis Stanford, EMS Region IV*

Providers around Illinois are already making moves to *get ahead of sepsis*. [Dennis Stanford](#), EMS System Coordinator at OSF St. Anthony's Alton, had been hearing about the growing septic rate in patients and *wanted to do something about it*. In conjunction with the Medical Director, he created a policy to identify septic patients in the prehospital setting. In a nutshell – *“If you think your patient may fit the general criteria to be septic, let's communicate that observation or belief to the receiving facility so they can start the sepsis protocol before the patient hits the door.”* In practice, EMS crews work through a checklist to see if the patient meets any criteria to qualify as a *possible* sepsis patient – providing a differential diagnosis. Upon the assessment of the possibility of sepsis in the patient, the providers are to advise the incoming facility of a **“CODE SEPSIS”** possibility during their initial radio report. This early warning allows the Emergency Department to initiate their sepsis protocol in a timely manner, *before* the patient arrives. IDPH commends this simple – yet potentially **high impact** – public health intervention.

## Protecting First Responders:



## Fentanyl Exposure



**Fentanyl** and its analogues pose a potential hazard to a variety of responders who could come into contact with these drugs in the course of their work. Responders are most likely to encounter illicitly manufactured fentanyl and its analogues in *powder, tablet, and liquid* form. Potential exposure routes of greatest concern include *inhalation, mucous membrane contact, ingestion, and percutaneous exposure* (e.g., needlestick). Skin contact is also a potential exposure route but is *not likely to lead to overdose* unless large volumes of highly concentrated powder are encountered over an extended period of time. **Brief skin contact with fentanyl or its analogues is not expected to lead to toxic effects if any visible contamination is promptly removed.** There are no established federal or consensus occupational exposure limits for fentanyl or its analogues. Check out the [educational video](#) by CDC and NIOSH on protecting yourself from occupational exposure.

## Illinois Statewide Submission Status

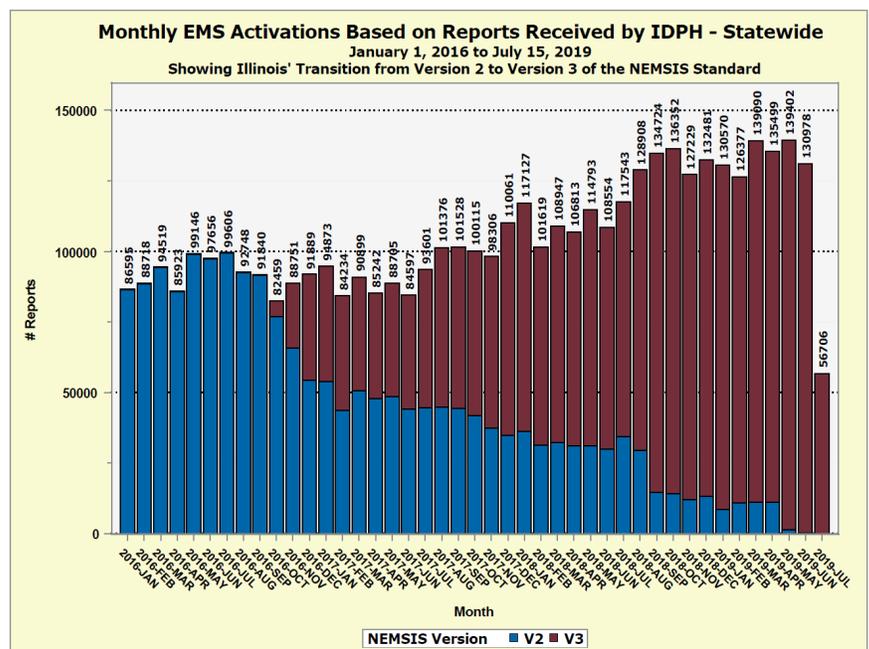
Agencies Submitting (V3)	<b>85.78%</b>
Agencies Submitting (V2)	<b>1.44%</b>
Agencies <b>Not</b> Submitting	<b>12.78%</b>

\*As of 15 July 2019, accounting for past 60 days

## IDPH Thanks YOU!

We have made exceptional progress as a state in prehospital data reporting. We appreciate those whom have been consistently submitting for years, as well as those whom have made the concerted effort toward compliance in recent months. We look forward to progressing the quality of EMS care in Illinois with the help of these data.

*Keep up the great work!*



## INVESTIGATION RESULTS

### Frequently Reported KII Themes

Most Frequent Themes	Illustrative Quotes
NEMESIS V3 records are more time consuming and difficult to complete, compared to V2 records or paper records	<i>The most intimidating things were some of the new data elements and number of options.</i>
Low computer literacy and/or IT issues	<i>The age of our medics is increasing, they didn't grow up with electronics like our newer ones.</i>
Current (or past) personnel neglect(ed) their responsibilities, actively or passively	<i>Just like everyone who speeds but they don't care until they get caught – this is similar.</i>
Lack of transparency, or given the runaround, from third party software vendor	<i>I pay the software vendor to demystify the big spreadsheet and requirements and I still don't know if I'm actually Illinois-compliant.</i>
Unaware of statute to send records, or assumed auto-submission was happening	<i>I wasn't aware that our system wasn't automatically sending records to the state.</i>
Illinois ePCR requirements, in addition to national specifications	<i>The IL requirements are so stringent it makes it hard to actually make the report work.</i>

# Barriers to ePCR Compliance: What's the Word?

This past spring, members of the Illinois EMS community were contacted by IDPH to participate in key informant interviews and an online survey. The objective of the investigation was to gather perspectives on barriers, and possible solutions, to utilizing NEMESIS Version 3-compliant software to create ePCR and then submit those records to IDPH.



Specific barriers to ePCR reporting in Illinois were identified, as well as opportunities for a path of “less” resistance for submission of records to IDPH. To mitigate reported barriers to compliance, to date, IDPH has instituted a quarterly newsletter for the EMS community and also adapted the [IDPH Prehospital Data Program website](#), including the [technical specifications page](#), for a better user experience.

### Top Barriers to ePCR Reporting

- 1) Issues with software (f=54)
- 2) Illinois-specific NEMESIS requirements (f=50)
- 3) None (f=43)
- 4) Costs associated with purchasing *hardware* (f=38)
- 5) Costs associated with purchasing *software* (f=30)

Results of this investigation have been (*or will be*) presented at the 2019 NASEMSO Annual Meeting (*won 3<sup>rd</sup> place in abstract competition*), the Illinois Public Health and Health Care Coalition Preparedness Summit, and the ImageTrend *Connect* Conference.

### Top Suggested Solutions

- 1) Improved communication from IDPH (f=64)
- 2) More user friendly IDPH website (f=60)
- 3) Training(s) from IDPH on free ePCR software, KeyData (f=41)
- 4) Nothing (f=35)
- 5) Unsure (f=34)

**An Investigation of Perceived Barriers to Electronic Patient Care Record Reporting by EMS Transport Provider Agencies to the Illinois Department of Public Health**

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CDC Foundation | Illinois Department of Public Health, Division of EMS and Highway Safety, Prehospital Data Program

#### Introduction

The Illinois EMS Systems Act and supporting administrative code enable the collection of NEMESIS Version 3-compliant prehospital patient care record data by licensed EMS transport vehicle providers, and the subsequent submission of these data to IDPH. In early 2016, IDPH became capable of accepting the web-service-based NEMESIS v3 ePCR reports, phasing out the manual batch submission of NEMESIS v2 records.

**“100% compliance isn't really possible anywhere.”**

#### Results

EMS agency-level (n=29) key informants were from varied agencies geographically and otherwise [volunteer, non-volunteer, mixed, fire department, governmental (non-fire), hospital-based, private (non-hospital)] EMS System Coordinator (n=24) key informants hailed from nine of Illinois' 11 EMS regions. Examples of the most frequent sentiments from the KII can be found in Table 1.

Survey sample frame= 680+ possible participants, with an approximate response rate of 27% (n=184).

Most frequently reported barriers were: *issues with software* (29.3%, 54), *IL-specific NEMESIS requirements* (27.2%, 50), *none* (23.4%, 43), *costs associated with purchasing hardware* (20.7%, 38).

To mitigate barriers, participants most frequently suggested: *improved communication from IDPH* (34.8%, 64), *more user friendly IDPH website* (32.6%, 60), *training(s) from IDPH on free ePCR software, KeyData* (22.3%, 41).

#### Objective

Non-submission or outdated reporting of EMS data is a problem across Illinois. EMS agencies not appropriately reporting lose out on proper oversight, monitoring of important trends, and quality assurance activities. Integrity of data is further threatened when utilizing NEMESIS v2, rather than v3.

*This investigation gathered perspectives on barriers, and possible solutions, to utilizing NEMESIS v3-compliant software to create electronic patient care records and submit those records to IDPH.*

Most Frequent Themes	Illustrative Quotes
NEMESIS V3 records are more time consuming and difficult to complete, compared to V2 records or paper records	<i>The most intimidating things were some of the new data elements and number of options.</i>
Low computer literacy and/or IT issues	<i>The age of our medics is increasing, they didn't grow up with electronics like our newer ones.</i>
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**Table 1: Barriers to ePCR Reporting**

#### Conclusion

Specific barriers to ePCR reporting were identified, as well as opportunities for a path of “less” resistance for submission of records to IDPH. To mitigate reported barriers to compliance, to date, IDPH has instituted a quarterly newsletter for the EMS prehospital community and also adapted the IDPH Prehospital Data Program website, including the technical specifications page, for a better user experience. Future phases of work will focus on the quality of ePCR data and, ultimately, on understanding and improving the quality of EMS care in Illinois.

#### Methods

**Key Informant Interviews (KII):** Participants were selected in order to understand the reasons for not reporting to IDPH at all, as well as why reporting is still being done in NEMESIS v2, rather than the current v3.4. Prior to speaking with key informants, a semi-structured interview guide was developed to learn generally about key issues with regard to ePCR reporting.

**Survey:** After reaching saturation through KII, a questionnaire was developed to gain perspective from a diverse group of EMS transport provider agencies. The Google Forms survey opened at the end of March 2019, and the EMS System Coordinators (n=64) distributed to their respective EMS agencies. “EMS Systems” are entities established by state statute to provide coordination and oversight of prehospital care among their member providers. The survey closed in mid-April 2019.