



BEST PRACTICES BULLETIN

From: NEMESIS Technical Assistance Center

To: State Office of EMS Directors and Data Managers

Re: Best Practices for Addressing Data Submission Lag

Date: December 9, 2021

The NEMESIS TAC is dedicated to assisting state/territory EMS offices with assessing the timeliness of electronic Patient Care Reports (ePCRs) submissions from EMS agencies to state EMS systems to the national NEMESIS repository.

According to Dr. Jon Krohmer, Director of NHTSA's Office of EMS, "The value of and demand for EMS data has moved beyond just research and well into public health surveillance, responsive resource allocation, the evaluation of innovative payment models, and the creation of novel evidence-based EMS delivery systems." This can only be accomplished if EMS ePCRs are completed and submitted in a timely manner. For more information regarding timely data submissions please reference this letter of support. <https://nemsis.org/timely-submission-letter-from-oems/>

The NEMESIS TAC will continue to work with state EMS data managers and software developers to implement mechanisms that identify and rectify obstacles associated with timely data submissions.

What is submission lag? The period of delay from the conclusion of a patient care encounter to the finalization of a ePCR record, submission to the state data system, then successfully received and processed into the National EMS Data Repository.

Why is submission lag an issue? As evidenced during the COVID-19 response, timely data submission is vital to the ability of states/territories and NHTSA's Office of EMS to appropriately assess and respond to immediate prehospital needs within communities and EMS industry needs including staffing, policies and protocols, and safety concerns among EMS clinicians.

Do all states/territories have delayed submissions? Not all states/territories experience widespread submission delays. Many states/territories have implemented rules and policies to require EMS agencies to submit completed ePCRs within 24 hours of closing the call. (Individual states define what constitutes a "closed" call.) There are a few states that require submission within 4 hours or less.

The purpose of this document is to describe NEMESIS resources available to evaluate data submission lag and how to communicate with EMS stakeholders to improve the timeliness of ePCR submissions to the state and ultimately to the national repository.

There are two NEMESIS resources that can be used to identify submission lag; the State Submission Lag Dashboard and, the v3 Data Submission Dashboard. State/territory EMS data managers and directors with a NEMESIS Account are able to access their state-specific data using these reports.

State Submission Lag Dashboard:

<https://nemsis.org/view-reports/state-reports/version-3-state-dashboards/>

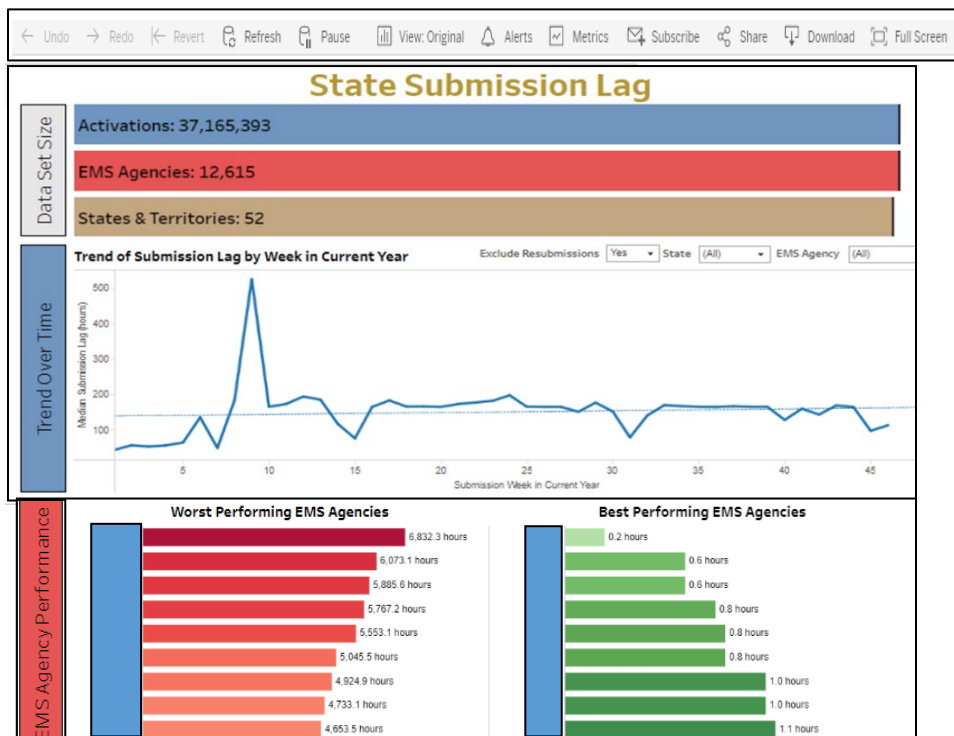
User Guide:

<https://wiki.utahdcc.org/confluence/display/NTD/V3+State+Submission+Lag+Dashboard>

The State Submission Lag Dashboard provides NEMESIS account holders with an overview of submission lag (based on ePCR receipt in the National repository) in their state for the current year. This is done by comparing the unit back-in-service date/time (eTimes.13) with the date/time the ePCR is submitted to the TAC.

In the EMS Agency Performance area of the dashboard, a chart of the twenty agencies with the most prolonged submission lag and the twenty agencies with the quickest submission times will be listed.

From the EMS Agency drop-down menu, a NEMESIS account holder can select a collection of agencies (or an individual agency) to assess submission lag using the state assigned agency number (dAgency.03). An account holder can also download a copy of the report and send it to a specific agency to provide constructive feedback or commend the agency for timely submissions.



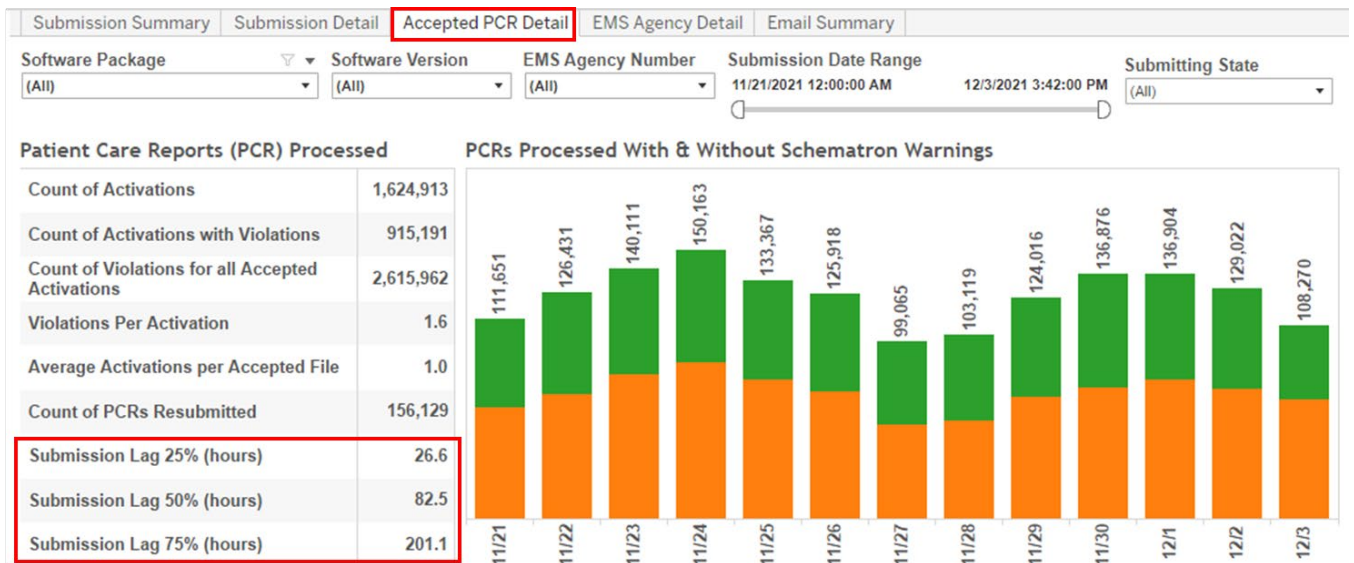
v3 Data Submission Dashboard:

<https://nemsis.org/view-reports/state-reports/version-3-state-dashboards/v3-state-data-submission-dashboard/>

User Guide:

<https://wiki.utahdcc.org/confluence/display/NTD/V3+State+Data+Submission+Dashboard>

The State Data Submission Dashboard provides NEMESIS account holders with timely and actionable information on the status and quality of the national data elements collected by EMS agencies and submitted by their state to the TAC. The default submission date range is a previous two-week snapshot. Submission lag times (in hours) are presented for quartiles of all data submitted during the two-week period. These findings can be found on the [Accepted PCR Detail](#) tab.



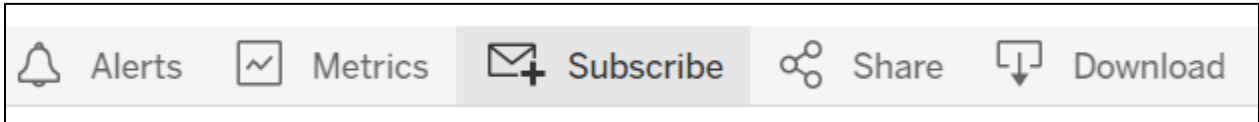
Here is an example of the **National Average Submission Lag for a two week period:**

Submission Lag 25% (hours)	26.6
Submission Lag 50% (hours)	82.5
Submission Lag 75% (hours)	201.1

In this example, the NEMESIS TAC receives 25% of ePCRs within 26.6 hours of the documented “back-in-service time” reported by the EMS agency. The TAC receives 50% of ePCRs within 82.2 hours (three days) of the documented “back-in-service” time, etc.

Best Practices Recommendations:

1. NEMESIS account holders are encouraged to review the State Submission Lag Dashboard and/or the State Data Submission Dashboard weekly. * Tip: The subscription function on Tableau dashboards allows the user to set up a submission account to automatically receive a report, sent via email, on a given calendar schedule. This report can be forwarded to agencies if desired.



2. Using these tools, State EMS data managers are encouraged to work with local agencies to adhere to timelines for submission requirements described in state rules, statutes or regulations.
3. Work with local EMS agency leaders, suggesting that an agency-specific submission lag report (PDF) can be made available to the agency to support Q/A review processes.
4. Some state systems may have minimum validity score requirement for ePCRs before they are submitted. Where possible, review and modify state validation scoring requirements to allow partially completed records be initially submitted. The NEMESIS submission system includes a “wipe and load” process allowing incomplete records to be replaced with updated records.
5. Review the state data collection system to ensure that it has not been configured with arbitrary delays before sending the record to the national NEMESIS repository.
6. Encourage agencies to submit ePCRs early. ePCRs can be resubmitted if changes are made and previous submissions are automatically overwritten.
7. On occasion, EMS agencies have reported “errors” or “warnings” from their ePCR software program and are unsure what to do about them. There are two types of data validation reported by EMS software: warnings and errors. An error, if not corrected, results in the record not being sent to the state repository. Submissions with “warnings” are accepted by the state and national repositories. All error and warning descriptions will be available to EMS clinicians and state EMS data managers. Share this information with EMS agencies to create a greater understanding of documentation corrections. Review web services information if needed at [V3 Web Services - NEMESIS](#).

For questions related to submission lag, or the NEMESIS tools available to assess submission lag, please reach out to the NEMESIS TAC (<https://nemsis.org/support/>).