

Oregon Emergency Medical Services Information Systems (OR-EMSIS) interim data collection guidelines for COVID-19 documentation

In response to the coronavirus pandemic, the Oregon Health Authority Emergency Medical Services has adopted changes to the electronic patient care report (ePCR). Data collected by first responders and medical staff will assist local, state, and national decision makers to protect public health during the crisis. This document provides guidelines for charting in OR-EMSIS, including changes to the required and recommended data fields for the ePCR. Contact information and additional COVID-19 information resources are also included.

For clinical guidance on treatment of possible COVID-19 patients see the interim guidance issued by the OHA here:

[COVID-19 Healthcare Partner Resources](#)

OR-EMSIS updates (4/23/2020)

Changes new in this guidance are designated in [bright blue](#).

The following NEMSIS standard data elements not previously requested by Oregon should be enabled and reported:

- [eHistory.901 - Recent Travel](#)
- [eHistory.902 - Travel Location](#)
- [eHistory.904 - Recent International Travel](#)
- [eHistory.905 - Recent State Travel](#)
- [eHistory.906 - Recent City Travel](#)
- eVitals.24 - Temperature
- eOther.03 - Personal Protective Equipment Used
- eOther.04 - EMS Professional (Crew Member) ID
- eOther.05 - Suspected EMS Work-Related Exposure, Injury, or Death
- eOther.06 - The Type of Work-Related Injury, Death or Suspected Exposure

The following codes and values should be enabled for these data elements:

- eHistory.08 - Medical/Surgical History
 - B97.29 - *Other coronavirus as the cause of diseases classified elsewhere*
 - Z20.9 - *Contact with and (suspected) exposure to unspecified communicable disease*

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- eProcedures.03 - Procedure
 - 312882009 - Taking nasal swab (EMT+)
 - 409528009 - *Surgical face mask* (for all license levels)

- eDisposition.24 - Destination Team Pre-Arrival Alert or Activation
 - Yes - Biological/Infectious Precautions
- eOther.03 - custom values have been added to record reuse of PPE
 - Face Shield (Reuse)
 - Gloves (Reuse)
 - Gown
 - Gown (Reuse)
 - Isolation Coveralls (Reuse)
 - Mask - N95 (Reuse)
 - Mask - N100
 - Mask - N100 (Reuse)
 - Mask -Surgical (Non-Fitted) (Reuse)

Additionally, the following NEMSIS standard and Oregon required data elements call for special attention when treating/transporting patients with respiratory and/or fever symptoms during the current crisis:

- eSituation.09 & eSituation.10 – Primary Symptom and Other Associated Symptoms
- eSituation.11 & eSituation.12 – Provider’s Primary and Secondary Impressions
- eNarrative.01 – Patient Care Report Narrative

All of these changes have been made available in the state ImageTrend EMS system. Changes have been applied to standard forms. If you use custom forms in ImageTrend, make sure that you incorporate the new recommended elements. A revised schematron will be available shortly.

If you work with a third-party vendor, work with them to implement these changes. As these are national custom elements they are likely to be available or in development in other platforms.

PUBLIC HEALTH DIVISION
Oregon Emergency Medical Services & Trauma System

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Additional Information and Resources

For general information on COVID-19 in Oregon, call **211**
Oregon Health Authority COVID-19 Updates

Centers for Disease Control and Prevention COVID-19:
Clinical Criteria
EMS Guidance
Coding Guidance

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OR-EMSIS update detailed guidance

eSituation.09 and eSituation.10 – Primary and Other Associated Symptoms

Use these fields to record all relevant symptoms¹ such as R50.9 *Fever, unspecified*, R05 *Cough*, or R06.02 *Shortness of Breath*. These data will assist in identifying the ways that patients who are later confirmed to be COVID-19 cases might present to EMS personnel (see sidebar example symptoms).

eSituation.11 and eSituation.12 – Provider’s Primary and Secondary Impressions

Reserve use of this field to record conditions that you can confirm in the field, such as J18.9 *Pneumonia*, J21.9 *Acute bronchitis*, or J80 *Acute respiratory distress syndrome*.

eHistory.08 – Medical/Surgical History

We will be activating the following ICD-10 codes for use in the medical history field:

- B97.29 – *Other coronavirus as the cause of diseases classified elsewhere*
- Z20.9 – *Contact with and (suspected) exposure to unspecified communicable disease*

Only use the code B97.29 for cases of COVID-19 confirmed by test. Use the Z20.9 code for patients that are reported to have had contact with a presumed or confirmed case.

eHistory.901 Recent Travel

This NEMSIS custom data element is now recommended for documenting whether the



Source: CDC Coronavirus Disease 2019 (COVID-19)¹

Common symptoms and impressions from presumed and confirmed COVID-19 cases in Oregon

Symptoms (eSituation.09)

- Respiratory - Shortness of breath (R06.02)
- Weakness (R53.1)
- Respiratory - Dyspnea (R06.00)
- Syncope/collapse/fainting (R55)
- Acute respiratory distress syndrome (J80)
- Pain
- Cognitive

Primary Impression (eSituation.11)

- Respiratory - Acute respiratory distress (J80)
- Fever (R50.9)
- Respiratory - Other/unspecified (J98.9)
- Cognitive - Altered mental status (R41.82)

¹ CDC symptoms guidelines

<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

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patient has travelled, which may be relevant to risk of COVID-19 infection. Recent travel includes any travel within the last 30 days. This is a binary field with choices of “Yes” or “No.”

eHistory.902 Travel Location

This NEMESIS custom data element is now recommended for documenting locations visited in recent travel. This free text field may be used to record the destination of any recent trips (past 30 days).

eHistory.904 - Recent International Travel

This NEMESIS custom element documents all countries (outside the US) visited by the patient prior to symptom onset (past 30 days).

eHistory.905 - Recent State Travel

This NEMESIS custom element documents all the states visited by the patient prior to symptom onset (past 30 days).

eHistory.906 - Recent City Travel

This NEMESIS custom element documents all the cities visited by the patient prior to symptom onset (past 30 days).

eNarrative.01 – Patient Care Report Narrative

Use the narrative field to note suspected cases. Use the keyword “COVID-19” in your narrative so that suspected cases may be identified in the data.

eVitals.24 – Temperature

Record temperature along with other patient vitals regardless of fever indication for all cases involving cough, sore throat, difficulty breathing, flu-like symptoms or other respiratory illness.

eProcedures.03 – Procedure

The CDC recommends placing a face mask on patients presenting cough, or any combination of other COVID-19 symptoms. Document the SNOMED physical object code 409528009 for “Surgical face mask.”



Photo Credit: CDC/Debora Cartagena

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Document COVID-19 test administration using the procedure code 312882009 for “Taking nasal swab.”

eDisposition.24 – Destination Team Pre-Arrival Alert or Activation

Use this field to document if you are transporting a suspected, presumed or confirmed COVID-19 patient and notify the destination hospital prior to arrival. Choose “Yes-Biological/Infectious Precautions” and include the term “COVID-19” in the narrative.

eOther.03 – Personal Protective Equipment Used

EMS should record Personal Protective Equipment (PPE), such as respirator or mask, eye protection, and gloves, used by each crew member using this field. Currently, the CDC recommends use of gowns² in addition to other PPE when treating suspected, presumptive or confirmed cases of COVID-19. ImageTrend has implemented gown as a custom value for users of the state system. If your agency uses a third-party vendor and “gown” is not an option, use “other” and specify “gown” in narrative.

ImageTrend has implemented national custom elements for reuse of PPE have been adopted to document efforts to preserve limited supplies of necessary protective equipment these include “Face Shield (Reuse),” “Gloves (Reuse),” “Gown (Reuse),” “Isolation Coveralls (Reuse),” “Mask- N95 (Reuse),” “Mask-Surgical (Non-Fitted) (Reuse).” If your agency uses a third-party vendor and these values are not yet available document PPE as usual and include “PPE reuse” in the narrative.

eOther.04 – EMS Professional (Crew Member) ID

Adding this field allows for documentation of PPE and exposure information for each crew member, rather than for the entire crew. Use crew member full names or license ID (as opposed to a generic role such as “EMT” or “paramedic”) so possible exposure notifications can go to specific individuals if necessary.

² CDC guidelines for PPE

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirator-use-faq.html>

Procedures for donning and doffing PPE (with gown)

<https://www.cdc.gov/niosh/npptl/pdfs/PPE-Sequence-508.pdf>

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eOther.05 – Suspected EMS Work-Related Exposure, Injury, or Death

This is a binary field with choices of “Yes” or “No.” Like PPE, document for each crew member rather than for the overall crew

eOther.06 – The Type of Work-Related Injury, Death or Suspected Exposure

This is a multi-select field that allows for specifying potential exposures during patient care. Like PPE, this should be documented for each crew member rather than for the overall crew.

Contact

If you have additional questions or concerns, please contact Oregon EMS & Trauma Systems at **EMS.TRAUMA@dhsosha.state.or.us**

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Oregon EMS COVID-19 Guidance Quick Reference (Updated 4/23/2020)

Data Element	Description	Guidance
eSituation.09 & eSituation.10	Primary Symptom and Other Associated Symptoms	Required. Special attention when treating patients with respiratory and/or fever symptoms. Record relevant symptoms such as R50.9 Fever, unspecified, R05 Cough, or R06.02 Shortness of Breath
eSituation.11 & eSituation.12	Provider's Primary and Secondary Impressions	Required. Special attention when treating patients with respiratory and/or fever symptoms. Record conditions confirmed in the field, such as J18.9 Pneumonia, J21.9 Acute bronchitis, or J80 Acute respiratory distress syndrome.
eHistory.08	Medical/Surgical History	B97.29 - Other coronavirus as the cause of diseases classified elsewhere for cases confirmed by test; Z20.9 - Contact with and (suspected) exposure to unspecified communicable disease for patients who have had contact with a presumed or confirmed case.
eHistory.901, eHistory.902, eHistory.904, eHistory.905 & eHistory.906	Recent Travel, Travel Location, Recent International Travel, Recent State Travel, Recent City Travel	Recommended. Document whether patient travel and the destination of recent trips (30 days prior to symptom onset).
eNarrative.01	Patient Care Report Narrative	Required. Include keyword "COVID-19" for suspected cases and record any PPE not documented elsewhere.
eVitals.24	Temperature	Recommended
eProcedures.03	Procedure	SNOMED Material Code 409528009 - Surgical face mask (all license levels) 312882009 - Taking nasal swab for administering COVID-19 test (EMT+)
eDisposition.24	Destination Team Pre-Arrival Alert or Activation	If you notify the destination hospital prior to arrival. Choose "Yes- Biological/Infectious Precautions" and include the term "COVID-19" in the narrative.
eOther.03	Personal Protective Equipment Used	Recommended. Document additional PPE using Other and document using eNarrative.01 (e.g. "gown").
eOther.04	EMS Professional (Crew Member) ID	Recommended
eOther.05	Suspected EMS Work-Related Exposure, Injury, or Death	Recommended
eOther.06	The Type of Work-Related Injury, Death or Suspected Exposure	Recommended