

Industry and Occupation

CSTE DSWG Data Element Specific Team

11/17/2023



Council of State and Territorial Epidemiologists

Please mute phone/ headset/ computer audio!

Agenda

- Welcome & Announcements
- Industry and Occupation Discussion/Polling
- Next Steps
- Wrap-Up & Adjourn

Meeting ground rules



- Discussion Guidelines
 - "Raise" your hand
 - Use the chat to provide feedback and ask questions
 - When called, state your name and affiliation
 - Stay on point, be brief, and within the context of the discussion in progress
 - 80/20 consensus
 - Co-Chairs/moderators' prerogative to move the discussion forward as needed
 - [Post-meeting input form](#) is always available for additional comment
 - Be courteous and be open to new ideas

Active participation encouraged for all!

- Chats, voting, comments, etc.
- Includes STLT jurisdictions + CDC Programs + CSTE, etc.

Core Data: In Scope for DSWG



- Identify core data elements for surveillance **for transmission to CDC**
 - For situational awareness or routine, cross-condition case surveillance
 - For case-based surveillance (not syndromic, not aggregate reporting)
 - Within *selected* data classes (e.g., hospitalization, travel history) that are used for multiple conditions
- Identify common definitions, value sets/code sets, structure, and interpretation notes for those core data elements
- Recommend best practices for how selected data elements are collected, structured or populated within PHA surveillance systems, if/when that will affect the interpretation of the data transmitted to CDC

Core for CDC Transmission ≠ Required

Even if a data element or class is identified as appropriate for transmission to CDC, this does *not* mean we need to fill in or send an answer for every core element for every case!

- It is okay to leave the data field as blank or Unknown if the information is not available, not a priority, or not useful for particular conditions.

Data elements and data classes should be considered for core if they are relevant for many conditions

- There is no set number that defines "many".
- Would you rather see the element in (for example) a GenV3 MMG? or in the applicable disease-specific MMGs?

Industry and Occupation Discussion



Potential Core Data Elements



Data Element	Definition	Value set or coding system	Abstracted/ Derived/ Created	Potential Input Data Source(s)
Current Industry Yes Core	Case's current industry. <i>Better as "Case's current industry at the time of event (CCCD)?"</i>	Both a free-text field and a standardized field using Industry-CDC-Census 2010. Switch to NAICS	Abstracted Derived	• Case investigation • eCR
Current Occupation Yes Core	Case's current occupation. <i>Better as "Case's current industry at the time of event (CCCD)?"</i>	Both a free-text field and a standardized field using Occupation-CDC-Census 2010. Switch to SOC	Abstracted Derived	• Case investigation • eCR
Employed in Specific Setting? [Template for specific conditions.]	During the incubation period or infectious period of the case, was the case working as a _____? (Healthcare worker, Food handler, etc.)	Yes/No/Unknown	Derived	• Case investigation

In previous work, the DSWG has defined a Calculated Case Counting Date (CCCD) for use by jurisdictions.

The CCCD is defined as the earliest available of six component dates associated with a case. (All component dates may not be available, relevant, or collected for each case.)

- Symptom Onset Date
- Clinical Diagnosis Date
- Earliest Specimen Collection Date Associated with a Positive Lab Result
- Earliest Result Date of a Positive Lab Result
- Date First Received by Public Health Agency
- Date Entered/Record Initiated

Current I/O



Data Element	Definition
Current Industry	Case's current industry. <i>Better as "Case's current industry at the time of event (CCCD)?"</i>
Current Occupation	Case's current occupation. <i>Better as "Case's current industry at the time of event (CCCD)?"</i>

Previous discussion was split between utilizing CCCD versus time of event to define "current".

CCCD may change during case investigation, may not capture all the information needed from a longer exposure period.

Time of event has less specificity for clarity in interpretation but could provide more flexibility to collect all information relevant for a particular condition.

Between Meeting Poll



What is the purpose for capturing I/O?

- **To capture risk for exposure (10)**
- **Identify relationships between work/disease (7)**
- **Create occupation specific messaging (6)**
- To capture risk of transmission (5)
- Assess SDOH/Health Equity (2)
- Outbreak Identification (2)
- Core demographic information, not condition specific (1)
- Variable for Analysis (i.e., vaccination rates by I/O) (1)

Between Meeting Poll



If using "time of event", do we need to give a better definition of "time of event" in interpretation notes?

- Yes (16)
- No (3)

What is the time of event?

- **Time of exposure to causative agent (6)**
- **Need to align with CCCD (5)**
- **Condition specific (3)**
- Date of onset (2)
- Current should be defined as within the last year (2)
- Definition needs to not change condition to condition

Between Meeting Poll



Please select your preferred definition of Current Industry/Occupation that can function across all conditions:

- Current I/O at the time of event (2)
- **Current I/O at the time of event with interpretation notes giving more explanation about ‘time of event’ (but not associating with a specific date) (8)**
- Current I/O at the CCCD (4)
- Current I/O with new component data element “Date of Current I/O” (2)
- Other, please specify (1) ("Current I/O", demographic variable)

Between Meeting Poll



Please select all of the definitions of Current Industry/Occupation that you can live with:

- Current I/O at the time of event (12)
- **Current I/O at the time of event with interpretation notes giving more explanation about ‘time of event’ (but not associating with a specific date) (16)**
- Current I/O at the CCCD (10)
- Current I/O with new component data element “Date of Current I/O” (9)

Discussion



What interpretation notes are appropriate and sufficient to describe the time of event?

Should these data elements repeat to allow for capture of multiple I/O?

Should these data elements be called "Current" I/O? Or remove the word current?

Data Element	Definition
Current Industry or Industry	Case's [current?] industry at the time of event. <i>The "time of event" for industry should capture all industries in which the case worked during their likely period of exposure through illness onset or diagnosis.</i>
Current Occupation or Occupation	Case's [current?] occupation at the time of event. <i>The "time of event" for occupation should capture all occupations in which the case worked during their likely period of exposure through illness onset or diagnosis.</i>

Polling process



- Poll questions will be shown first on a slide before poll opens
 - Opportunity for clarifications & questions
- Questions will be mostly Yes/No
 - Feel free to abstain if you don't have a preference or don't feel strongly
- Opportunity for limited discussion on questions with a big split

Polling – I/O Core Definition



Should Industry/Occupation be defined as "at time of event" with interpretation notes as discussed?

- Yes – Support this definition.
- Yes – Can live with the definition.
- No – Needs different definition.

Definition

Case's [current?] industry at the time of event.

The "time of event" for industry should capture all industries in which the case worked during their likely period of exposure through illness onset or diagnosis.

Reminder:

Core data for surveillance = Data classes or elements used for situational awareness or routine, cross-condition case surveillance for transmission to CDC. These elements may remain empty for cases/conditions where not applicable or unavailable.

Polling – Repeatable I/O



Should the core Industry and Occupation data elements repeat to allow for capture of multiple values for industry and occupation?

- Yes
- No

Reminder:

Core data for surveillance = Data classes or elements used for situational awareness or routine, cross-condition case surveillance for transmission to CDC. These elements may remain empty for cases/conditions where not applicable or unavailable.

Within the Carbon Monoxide MMG, this data element is present:

Occupation Related to Exposure	Is the patient's carbon monoxide exposure related to their current occupation?
--------------------------------	--

Would this type of data element be useful as a core element in combination with I/O?

- Indicator variable that the patient's exposure for this condition is potentially related to this occupation (Y/N/U)
- Other wording?

Core for CDC Transmission ≠ Required

Even if a data element or class is identified as appropriate for transmission to CDC, this does *not* mean we need to fill in or send an answer for every core element for every case!

- It is okay to leave the data field as blank or Unknown if the information is not available, not a priority, or not useful for particular conditions.

Data elements and data classes should be considered for core if they are relevant for many conditions

- There is no set number that defines "many".
- Would you rather see the element in (for example) a GenV3 MMG? or in the applicable disease-specific MMGs?

Polling – Exposure Related to Occupation



As part of the I/O data class, should a data element of "Occupation Related to Exposure" be included as a core data element?

- Yes - Indicator variable that the patient's exposure for this condition is potentially related to this occupation (Y/N/U)
- Yes – Other definition
- No – Not core

Reminder:

Core data for surveillance = Data classes or elements used for situational awareness or routine, cross-condition case surveillance for transmission to CDC. These elements may remain empty for cases/conditions where not applicable or unavailable.

Potential Data Elements from eCR/MMGs



Data Element	Definition	Value set or coding system	Potential Input Data Source(s)
Usual Industry	Industry in which the case has worked for the longest time while in their usual occupation.	Same as Current Industry	• Present in eICR IG v3.1, “Usual Industry Observation” [Value set = Industry CDC Census 2010, Translation = Industry NAICS Detail (ODH)]
Usual Occupation	Occupation held by the case for the longest amount of time during his or her life.	Same as Current Occupation	• Present in eICR IG v3.1, “Usual Occupation Observation” [Value set = Occupation CDC Census 2010, Translation = Occupation ONETSOC Detail (ODH)]
Employment Status	Case’s employment status at the time of event.	Employed/Unemployed/Not in Labor Force? Something else?	• Present in eICR IG v3.1, “History of Employment Status Observation” [Value Set = Employed; Unemployed; Not in Labor Force]

Data Element Name	Data Element Description	Value Set
Case Patient a Healthcare Worker	Hep A: Was the patient employed as a healthcare worker during the TWO WEEKS prior to onset of symptoms to ONE WEEK after onset of JAUNDICE? (If no jaundice, use two weeks after onset of symptoms.) Others: Was patient healthcare personnel (HCP) at illness onset?	1. Yes 2. No 3. Unknown

Polling – Additional I/O Elements



Are there any other industry or occupation related variables that need to be added as recommendations for core data for surveillance?

- Yes
- No

Reminder:

Core data for surveillance = Data classes or elements used for situational awareness or routine, cross-condition case surveillance for transmission to CDC. These elements may remain empty for cases/conditions where not applicable or unavailable.

Next Steps



- Look out for next steps via email. Draft document?
- Upcoming team meetings:
 - **12/15 12-1pm ET**– SOGI meeting 3 (*moved due to larger DSWG call*)
 - 12/15 1-2pm ET– I/O or Immunization
 - [Link to Sign Up](#)
- The next large DSWG call will be December 8th, 1-2pm.