Exposure, Risk, Underlying Conditions

CSTE DSWG Data Element Specific Team

04/12/2024

CSTE Data Standardization Workgroup Meeting

Please mute phone/ headset/ computer audio!

Agenda

- Welcome & Announcements
- ERU Definition Review and Polling
- Structure Call Review and Polling
- Data Class Indicator Review and Polling
- Pulse Check: Suspected Source of Exposure
- Next Steps
- Wrap-Up & Adjourn

DEST Opportunities for Participation

- The Data-element Specific Team (DEST) Interest Sign-Up sheet has been updated to include known future data classes:
  - Signs/Symptoms/Clinical Manifestations (Call #2 on Apr 19)
  - Disability
  - Identifiers (Case/Event Related/Laboratory)
  - Medication/Treatment
  - Laboratory
  - Race/Ethnicity/Tribal Affiliation
  - Social Determinants of Health
  - Reporting Source

Link to Sign-Up sheet:

https://app.smartsheet.com/b/form/3da89d48bda94fc7a33c4a8a505fe54a

If you have signed up previously but feel you are not getting the emails/meeting invites that you expected to get, please reach out directly to llane@jmichael-consulting.com.

DSWG Reminders

- SOGI draft out to wider DSWG for comment now!

- Next general DSWG call on April 26, 2024 at 1 PM

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 survey provided for additional input
  - Be courteous and be open to new ideas

Active participation encouraged for all!

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

In-scope vs Out-of-scope

What this is:

- Discussion about data elements/classes which are:
  - collected at the jurisdiction and sent to CDC for surveillance purposes
  - Abstracted, calculated, or derived from a combination of electronic sources, patient interviews and chart abstractions
- Collaborative consensus building about the best ways to approach the transmission of public health data in a standardized way

What this is not:

- Discussion of data elements for research studies
- Recommendations for public facing surveys
- Limitations on what can be collected for a data element within a jurisdiction
- Recommendations for how to ask about data elements in a case interview
- Implementation guidance

Data Class Review: Exposure, Risk, Underlying Conditions

Data Class Review

- Each data class → Many data elements
  - Exposures:
    Within an exposure period, did the person get a tattoo?
    Within an exposure period, did the person consume eggs?
  - Risk Factors:
    Is the person a healthcare worker?
    Has the person ever used tobacco?
  - Underlying Conditions:
    Does the person have a diagnosis of diabetes?
    Is the person positive for HIV?

- These were all voted in as distinct core data classes in the February ERU DEST call.

Proposed Definitions

Data Concept	Suggested Definition	Examples
Exposures	Within exposure window, either the person's contact with an entity (person, animal, or substance) or presence at a location where exposure to an agent could have occurred. (*e.g.* where did pathogen come from).	Within an exposure period: • Visited a water park • Got a tattoo • Worked in a daycare
Risk Factors	Characteristics, behaviors, or social factors that may increase the likelihood of developing a disease or condition.	• Substance Use ever • Unstable Housing • Smoking Status
Underlying Medical Conditions	Pre-existing medical conditions that may worsen the course or severity of a new disease or health condition.	• COPD • Diabetes • Prior History of Disease

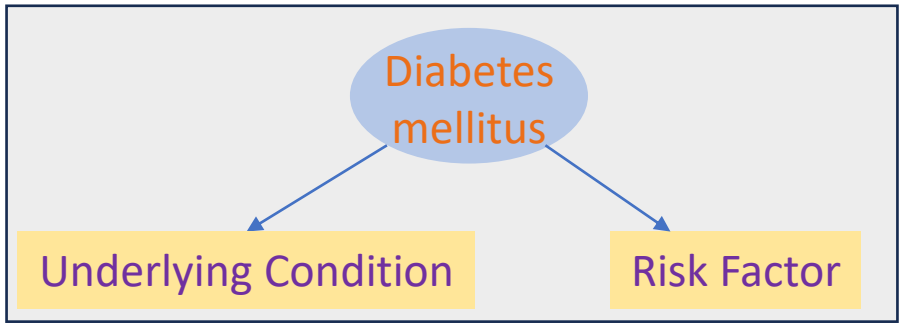
How will data elements be sorted into the three data classes?

Data elements will be assigned to the three data classes at the discretion of CDC programs.

→ Similar Data elements might be assigned to different data classes in different MMG's

Example:

Diabetes mellitus may remain as an Underlying Condition in the Respiratory and Invasive Bacterial Diseases (RIBD) MMG and may still be referred to as a Risk Factor in the COVID-19 mmg.



Exposures, Risk Factors, and Underlying Conditions

Proposed Exposure Definition

Data Concept	Suggested Definition	Examples
Exposures	Within exposure window, either the person's contact with an entity (person, animal, or substance) or presence at a location where exposure to an agent could have occurred. (*e.g.* where did pathogen come from)	Within an exposure period: • Visited a water park • Got a tattoo • Worked in a daycare

Points of Note:

- Includes a timing element
- Includes exposures to objects, locations, people

Poll 1 – Exposure Definition

- Is the following definition acceptable for the Exposures data class?
  - Yes
  - No

Data Concept	Suggested Definition
Exposure	Within exposure window, either the person's contact with an entity (person, animal, or substance) or presence at a location where exposure to an agent could have occurred. (*e.g.* where did pathogen come from)

Proposed Risk Factor Definition

Data Concept	Suggested Definition	Examples
Risk Factors	Characteristics, behaviors, or social factors that may increase the likelihood of developing a disease or condition.	• Substance Use ever • Unstable Housing • Smoking Status

Points of Note:

- No timing element included in base definition, could be implied in value set as in the examples above
- Reference to the likelihood of contracting a condition

Poll 2 – Risk Factors Definition

- Is the following definition acceptable for the Risk Factors data class?
  - Yes
  - No

Data Concept	Suggested Definition
Risk Factors	Characteristics, behaviors, or social factors that may increase the likelihood of developing a disease or condition.

Proposed Underlying Medical Condition Definition

Data Concept	Suggested Definition	Examples
Underlying Medical Conditions	Pre-existing medical conditions that may worsen the course or severity of a new disease or health condition.	• COPD • Diabetes • Prior History of Disease

Points of Note:

- Specifically asks about medical conditions
- Reference to the course or severity of infection

Poll 3 – Underlying Health Conditions Definition

- Is the following definition acceptable for the Underlying Health Conditions data class?
  - Yes
  - No

Data Concept	Suggested Definition
Underlying Health Conditions	Pre-existing health conditions that may worsen the course or severity of the disease or health condition.

ERU: Data Class Indicator

Data Class Indicator

Data Class Indicator:

Data Element (DE) Name	Data Element Description	May Repe	Value Set Name (VADS Hyperlink	HL7 Cardinalit	HL7 Implementation Note	Repeating Group Eleme
Did Underlying Condition(s) Exist	Did the subject have any underlying causes or prior illnesses?	N	Yes No Unknown (YNU)	[0..1]		NO
START: Underlying Conditions Repeating Group (Used for ABCs cases and National Surveillance Cases)						
Underlying Condition(s)	Listing of underlying causes or prior illnesses	N	Underlying Condition (RIBD)	[0..1]	OBX-5.9 **MAY** contain "Other, please specify" text response.	PRIMARY/ PARENT
Underlying Conditions Indicator	Underlying Conditions Indicator	N	Yes No Unknown (YNU)	[0..1]		CHILD
END: Underlying Conditions Repeating Group (Used for ABCs cases and National Surveillance Cases)						

- Answering “No” may remove the need to send the repeating group or explain why a repeating element is absent.
- May already exist in some systems.

Poll 4 – Data Class Indicator

Would a data class indicator be helpful for any of the following data classes?

(Please select all that apply.)

- Exposure
- Risk Factors
- Underlying Medical Conditions
- None of these data classes

ERU: What about structure?

CSTE

March Structure Calls - Review

While at the fair did the person enter any of the following locations?

- [x] pig barn
- [ ] cattle barn
- [x] horse barn
- [ ] food tent
- [ ] restrooms

Repeating Element

While at the fair did the person enter any of the following locations?

pig barn
(•) Yes ( ) No ( ) Unknown

cattle barn
( ) Yes (•) No ( ) Unknown

horse barn
(•) Yes ( ) No ( ) Unknown

food tent
( ) Yes ( ) No (•) Unknown

Restrooms
( ) Yes (•) No ( ) Unknown

Repeating Group

Individual Questions

While at the fair did the person enter the pig barn?
(•) Yes ( ) No ( ) Unknown

While at the fair did the person enter the cattle barn?
( ) Yes (•) No ( ) Unknown

While at the fair did the person enter the horse barn?
(•) Yes ( ) No ( ) Unknown

While at the fair did the person enter the food tent?
( ) Yes ( ) No (•) Unknown

While at the fair did the person enter the restrooms?
( ) Yes (•) No ( ) Unknown

March Structure Calls - Review

- Structure should be what makes sense for the data class.
- CDC: strong preference for repeating group
- STLTs: preferred structure was split between the three, likely reflecting differences in surveillance systems used across the US
- Adding additional elements into a repeating group can be complex to implement in some jurisdictional systems.
  - Parent/child/child is simpler than parent/child/grandchild*
- Strong message that consistency in structure across conditions for a data class is important.

*relationships displayed visually on Slide 28

Poll 5 – No/Unknown Values

How important is it to be able to send No or Unknown values in addition to Yes for Exposure, Risk and Underlying Conditions?

- Very important
- Moderately important
- Not important at all
- My answers are different depending on the data class
- I don’t know

Pulse Check – transmission/exposure questions

CSTE

Discussion: Suspected point of exposure

For the exposures collected for a particular condition, is it useful to have an additional question or indicator for STLTs to flag which they consider to be the most likely source or cause for this case?

- Is this data something your jurisdiction would regularly send to CDC?
- What are the challenges or concerns with this type of data element?
- Is this something that you think you would be able to send to CDC routinely (if included in MMGs)? If no, why not?

Next Steps

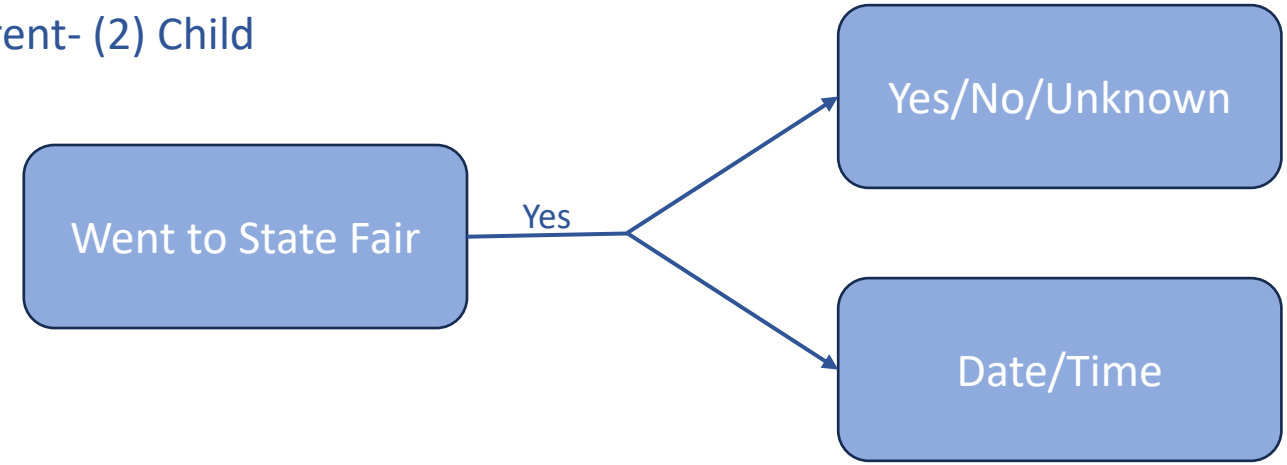
Upcoming DEST team meetings:

- **4/19 1-2 pm ET** – Signs, Symptoms, Clinical Manifestations, Call #2
- **5/10 1-2 pm ET** – Disability
- **5/17 1-2 pm ET** – Identifiers
  - Some topics: identifiers to link labs and cases, link maternal/infant cases

The next large DSWG call will be on 26 April 2024 at 1-2 pm ET.

March Structure Calls - Review

Parent- (2) Child



Parent-Child-Grandchild