DRAFT Generic v3 Data Dictionary Supplemental Guidance

This document is intended to be a supplemental resource for jurisdictions as they implement the Generic v3 HL7 v2® Implementation Guide or the Generic v3 CSV Implementation Guide. While the primary implementation guidance is within the Implementation Guide itself, this document allows for further data element descriptions and guidance. If any questions occur while implementing Generic v3, please reach out to edx@cdc.gov.

1.0 Supplemental definitions

1.1 Sex

The definition of the Sex data element is intentionally broad to allow capture of information from sources that are either not explicit about what exact concept is represented in the data (i.e. unclear if birth sex, administrative sex, etc., is represented) or have no clear point of origin and may not be defined, captured, or transmitted in a consistent manner across healthcare organizations. For example, the data transmitted via PID-8 in an Electronic Lab Reporting (ELR) HL7 v2 message or the HL7 Administrative Gender value in the TargetRecord section in an Electronic Initial Case Report (eICR) often have no clear point of origin and may not be defined, captured, or transmitted in a consistent manner across healthcare organizations, but is still appropriate to include in this field in a case notification.

1.2 Person Deceased & Deceased Date

These data elements should be populated any time the person is determined to be deceased. The cause of death does not need to be related to the notifiable condition for this data element to be populated. These data elements are recording if the person is deceased and when that occurred, regardless of cause of death.

1.3 Country of Usual Residence & Person Address

See "Revised Guidelines for Determining Residency for Disease Notification Purposes" located at Revised Guidelines for Determining Residency for Disease Notification for more details regarding determining usual residence. Additionally, “FAQs about implementing the ‘Country of Usual Residence’ data element” are located at Supporting Documents for Implementation.

1.4 Case ID & National Reporting Jurisdiction

The two fields of National Reporting Jurisdiction and Case ID are used together to define a unique case in the CDC database. The values for each of these data elements must remain the same when sending updates on a unique case. Any changes to these data elements will cause the addition of a new case to the CDC database. For more details, refer to the "Generic Data Elements that Define a New Case" document found on the Supporting Documents for Implementation website: Supporting Documents for Implementation.

1.5 Condition Code

Refer to the National Notifiable Diseases Surveillance System (NNDSS) Event Code List document for the list of conditions for the relevant year. This reference can be found on the NNDSS Technical Resource Center website under "Event Codes and Other Surveillance Resources": Event Codes & Other Surveillance Resources.

1.6 Case Counting Date (CCD)

Variations have existed across jurisdictions in the method and process of assignment of a particular date, week, or year to a given case for counting purposes. These variations make data analysis and aggregation at the national level more difficult to perform and interpret. When methods and processes vary, the result may be that comparing or aggregating data across jurisdictions is inappropriate or inaccurate. The Case Counting Date (CCD) is a standardized approach for jurisdictions to use to assign a case counting date. It is intended to be the most epidemiologically relevant date representing when disease occurred, based on the available information. For a full description, see Data Standardization: Workgroup Proposal for Standardized Case Counting Date, published by CSTE: Data Standardization: Workgroup Proposal for Standardized Case .

The six component dates that contribute to the Case Counting Date include:

- 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

All six data elements may not be available, collected, or even relevant for all cases or conditions. Of those dates that are available for a case, the assigned Case Counting Date should be the earliest of the available component dates. The Case Counting Date is required to be sent in each case notification.

Additionally, several of these component dates were reviewed and addressed in more detail in the DSWG brief (23-IB-SI-01), Data Standardization: Dates of Importance to Public Health Surveillance: Data Standardization: Dates of Importance to Public Health Surveillance Illness (Symptom) Onset Date, Report Dates, Laboratory-Related Dates, (Clinical) Diagnosis Date

Data Element	Scenario 1	Scenario 2	Scenario 3
Symptom Onset Date	1/5/2022	Unknown	Asymptomatic
Clinical Diagnosis Date	1/10/2022	n/a	3/1/2022
Earliest Specimen Collection Date Associated with a Positive Lab Result	1/9/2022	2/19/2022	n/a
Earliest Result Date of a Positive Lab Result	1/10/2022	2/21/2022	n/a
Date First Received by Public Health Agency	1/11/2022	2/21/2022	3/4/2022
Date Entered/Record Initiated	1/12/2022	2/25/2022	3/4/2022
Case Counting Date	**1/5/2022**	**2/19/2022**	**3/1/2022**

1.7 Death Associated with Condition

The phrase "associated with the condition" is used to allow for a reasonable amount of flexibility for case investigators to indicate that a condition **may have** contributed to a person's death even if it was not listed as the primary or secondary cause of death. When determining if a death is associated with a condition, many factors might be considered, including timing of illness, clinical manifestation of illness, complications, and underlying conditions. A condition does not have to be explicitly cited in the person's medical or death certificate in order for the death to be considered associated with that condition. For example, if the progression of illness leads to an exacerbation of a comorbidity, then this may be enough to classify a death as associated with a condition.

1.8 Date First Received by Local Health Agency

The Date First Received by Local Health Agency may not be relevant for jurisdictions with a centralized health agency. A similar data element included in generic v2.0 MMG asked for 'Earliest Date Reported to County'. "County" was replaced by "Local Health Agency" since not all local health agencies are county health agencies. "Local Health Agency" can include county health departments, city health department, tribal health departments, or other health departments below the state level.

1.9 Pregnancy Status & Estimated Date of Delivery

Pregnancy Status is intended to be captured in relation to the occurrence of the condition for case notification. For instance, a person that is pregnant at the CCD and subsequently delivers would be identified as "pregnant" for their pregnancy status.

For cases where notification to public health occurs after delivery but the CCD is a known date prior to delivery or on the day of delivery, the pregnancy status should be marked as "pregnant".

The variable “Estimated Date of Delivery” (EDD) of the pregnancy should only be captured when the pregnancy status of a case is “pregnant”.

If only the gestational age of the fetus is known from the medical record, the EDD can be estimated from the gestational age and date of documentation of the gestational age.

For example, if the EDD is 40 weeks of gestational age, which is also 280 days from the first date of the last menstrual period, a fetus with a gestational age of 20 weeks and 3 days on January 1, 2020, would be 137 days from their EDD of May 17, 2020.

A suggested method for calculating if only the weeks of gestational age are known (e.g., 16 weeks) is to utilize an assumption of XX weeks and 3 days (e.g., 16 weeks and 3 days), so the estimated value will be within 4 days of the actual EDD.

1.10 Binational Reporting Criteria

The Council of State and Territorial Epidemiologists (CSTE) approved position statement 13-SI-02 (Incorporating a Binational Variable into the National Notifiable Diseases Surveillance System) defines a binational generic data element for NNDSS.

A data field would identify a case as binational when the case meets one or more of the following criteria:

- Potentially exposed while in Mexico or Canada
    - Example: A US resident travels to a resort in Mexico or Canada for a week and returns to the US and is diagnosed with shigella the day he returns suggesting the exposure was not in the US.
- Potentially exposed by a resident of Mexico or Canada
    - Example: A resident of Canada or Mexico visits family living in the US for a week. She has had a cough for 3 weeks before staying with her relatives in the US and the cough continues during her visit. A week after the visitor returns home, an infant living in the US home develops a cough which evolves into whooping paroxysm and is diagnosed with pertussis. The US family informs the visiting relative who is still coughing, and she is also diagnosed with pertussis by her doctor.
- Resident of Canada or Mexico
    - Example: A student from Mexico or Canada visits the US for a summer 2-week course and develops poor appetite and jaundice and is diagnosed with hepatitis A in the US His toddler sibling at home is in an unlicensed day care center which has recently had a high absentee rate.
- Has case contacts in or from Mexico or Canada
    - Example: A US resident returns from a 6 month stay with a large family of relatives in Canada or Mexico. He had developed a chronic cough in that country which persists in the US where he also becomes febrile with weight loss. He is diagnosed with tuberculosis. A contact investigation is initiated which necessarily involves his binational family contacts.
- Exposure to suspected product from Canada or Mexico

    - Example: A US resident returns from Canada or Mexico where she purchased unpasteurized cheese from a small business. She is pregnant, develops fever, and is hospitalized. A blood culture grows *Listeria monocytogenes* and the imported cheese also tests positive for the same organism and strain.
- Other situations that may require notification or coordination of response
    - Examples: A measles outbreak without known cross border contacts in a border community or state; exposure to an exported contaminated product from the US to Canada or Mexico.

For additional information, see Example Scenarios for Each Valid Value Used in the Binational Generic Data Element:
ExampleScenariosforEachValidValueUsedInBinationalGenericDataElement.pdf

1.11 Housing Status

This data element is a snapshot of Housing Status at the earliest epidemiologically relevant date associated with the case (i.e., CCD). This is not intended to capture whether someone has ever experienced homelessness or someone experienced homelessness at any point during the incubation period for the condition.

During a case investigation, it may be identified that a person is experiencing homelessness without documentation or knowledge of their specific living situation; the value of 'homeless' is meant to capture both sheltered and unsheltered homelessness. Further detailed information is intended to be captured under Primary Living Situation.

1.12 Primary Living Situation

This data element is a snapshot of someone's primary living situation at the earliest epidemiologically relevant date associated with the case (i.e., CCD). This is not intended to capture if someone has ever lived in a certain situation or all living situations at any point during the incubation period for the condition.

Responses for a correctional facility should indicate the type of facility where a person is detained, regardless of the type of agency that may have legal custody over the person (e.g., someone in state custody may temporarily reside in a local jail).

1.13 Hospitalization

Hospitalization-related data elements are critical to gauge severity of a novel notifiable condition, or a notable severity change within a known notifiable condition. The purpose of these data elements is to identify if a person was hospitalized related to the condition under investigation.

When determining whether a hospitalization is associated with the condition, several components may contribute to the decision: the facility type, the encounter status, the encounter duration, the encounter reason, and the timing of the hospitalization in relation to the condition. In general, a response of "Hospitalized" = "Yes" should follow the guidelines below:

Facility type = Acute care facility

- Hospitalization should reflect a stay at an acute care facility, not a long-term care, assisted living, or hospice facility.

Encounter status = Inpatient or Observation

- Emergency department visits that do not result in inpatient or observation admission should *not* be considered hospitalizations.

Encounter duration

- The person's inpatient admission to the hospital must be 24 hours or more in duration. An emergency department visit lasting more than 24 hours should not be counted as a hospitalization.

Encounter reason

- The condition under public health surveillance should be associated with the reason for hospitalization. This may include an exacerbation of a comorbid condition that affects the duration or severity of the patient's illness.
- The reason for hospitalization may be specified or may be inferred. Potential sources of information within the medical record may include clinical notes and diagnosis codes.
- The condition under surveillance need not be explicitly stated in the medical record or report, if the clinical manifestations make sense for the condition in question. This may include the systemic effects of the condition or exacerbation of a comorbid condition, for example hospitalization for cardiopulmonary disease for an influenza case. This criterion may need to be applied differently depending on the condition, resource capacity, and sources of information, as it may be unrealistic to try to discern whether the condition affected the hospitalization or not in many situations.

Timing

- The timing of the hospitalization should make sense in relation to the timing of the case (e.g., onset, diagnosis, laboratory results) and the disease process for the condition under surveillance.

The extent of hospitalization information available for a given case may vary by jurisdiction or by condition for numerous reasons. "Hospitalized" = "Yes" might represent hospitalizations that are a direct outcome of the condition as well as those that are more indirectly associated. Additionally, a "No" response should be used to indicate that there is sufficient certainty that the patient subject did not experience a hospitalization associated with the condition (e.g., the patient was not hospitalized at all, *or* the hospitalization was unrelated to the condition under surveillance). "No" should *not* be used to indicate a lack of information about the hospitalization status. Depending on the extent of a jurisdiction's case investigation capacity and available data, "Hospitalized" may be frequently "Unknown" or blank due to insufficient information. Also, in cases where the subject was hospitalized but it is not clear whether the hospitalization was associated with the condition under surveillance, "Hospitalized" should take on a value of "Unknown." Depending on investigation capacity, reporting volume, and how each jurisdiction obtains hospitalization

information for given conditions, jurisdictions might be able to more consistently confirm that a patient *was* hospitalized than to confirm the person was *not* hospitalized.

Hospitalization example: Person went to the Emergency Department because of an altered level of consciousness and clinical staff suspected a meningitis infection. After assessment in the Emergency Department, the person was admitted to the hospital and directly moved into an intensive care unit (ICU) because of difficulty breathing and convulsions. The patient was immediately assessed, and cerebrospinal fluid (CSF) and blood tests were ordered. Patient was determined to have a *Listeria monocytogenes* infection on the fifth day of her hospital admission and was in the hospital for a total of 3 weeks.

If the person is hospitalized for this condition one time or more times, within the timeframe of interest, all the admission date(s) and discharge date(s) ought to be reported through the Dates of Hospitalization Repeating Group, rather than limiting to the most recent hospitalization.

1.14 Admitted to Intensive Care Unit

If the person was admitted to the ICU during any of their hospitalizations, then the answer for 'Admitted to Intensive Care Unit' should be marked 'Yes.' Admission to an ICU varies due to specialty and intensity level, but what is being asked here is if the person's clinical presentation needed elevated care while admitted to the hospital. Admission to or movement within an ICU or specialty ICU can occur while admitted to a hospital if the person's condition deteriorates and requires a different level of care and observation. While changes within level and specialty of ICUs occur, that more specific data will not be included as part of case notification.

1.15 Identifiers Repeating Group

Generic v3 contains a data element identifier repeating group used for sending multiple case identifiers related to a case notification. The repeating group contains an Identifier Type and an Identifier Value, where Identifier Type conveys a description of the identifier and the Identifier Value captures the actual value for that identifier. In this way, this can be thought of like a key-value pair with the data elements of "Identifier Type" serving as the key and "Identifier Value" serving as the pair. The repeating structure allows for flexibility in capturing additional identifier types across formats and conditions as needs arise. The anticipated use of this is for capturing relevant identifiers either during emergency responses or capturing identifiers that reduce the need for duplicate data transmission by allowing CDC to connect data sources. By contrast, the addition of a unique data element to capture a single identifier requires regulatory and versioning changes that can take far longer than this current approach.

The types of identifiers connected to a case may vary, as some identifier types are only applicable to certain cases or conditions. Further guidance will be provided on which identifiers would be expected for particular conditions and circumstances. It is not expected that each value in the value set would be provided for each case. Many cases will have no instances of this repeating group. Person ID (formerly Local Subject ID) and Case ID (formerly Local Record ID) are not to be included in this repeating structure.

As an example, transmission of these data elements for a case with a CDC National Outbreak Reporting System (NORS) ID of "EIP1234567" and a Legacy Case ID of "ZYX7654321" would look like this in HL7 v2:

OBX|nn|CWE|TBD^Identifier Type^PHINQUESTION|1|INV883^NORS ID^LN|||||F

OBX|nn|ST|TBD^Identifier Value^PHINQUESTION|1| EIP1234567|||||F

OBX|nn|CWE|TBD^Identifier Type^PHINQUESTION|2|77997-5^Legacy Case Identifier^LN|||||F

OBX|nn|ST|TBD^Identifier Value^PHINQUESTION|2|ZYX7654321|||||F

Or like this in CSV:

Identifier1.identifier_type: INV883

Identifier1.identifier_value: EIP1234567

Identifier2.identifier_type: 77997-5

Identifier2.identifier_value: ZYX7654321

Table: Description of each value currently in Identifier Type Value Set

Code	Concept	Description
PHC946	CDC-assigned Case ID	CDC-assigned Case ID: A CDC-assigned ID for use in situations such as an emergency response (e.g., DCIPHER IDs assigned to cases in early mpox response). Usually a distinct ID from the required element "Case ID" assigned by the jurisdiction.
INV883	NORS ID	The outbreak ID from CDC's National Outbreak Reporting System (NORS) with which the case report is associated.
77997-5	Legacy Case Identifier	This field is to be populated only if migrating between systems. If migrating, populate with the original Case ID. CDC uses this identifier to link current case notifications to case notifications submitted by a previous system (NETSS, STD-MIS, etc.).

1.16 Disability Type

Disability is defined from a functional perspective (e.g., difficulty with personal care, functional dependence), with data collection aligned with standard question sets, such as the ACS[1] (American Community Survey) or the Washington Group on Disability Statistics (WG) questionnaires[2], consistent with the ICF (International Classification of Functioning, Disability and Health).

Disability Type is a coded data element with a value set defined as:

- **Hearing**: deaf or having serious difficulty hearing.

- **Vision**: blind or having serious difficulty seeing, even when wearing glasses.
- **Cognitive**: difficulty remembering, concentrating, or making decisions.
- **Ambulatory**: serious difficulty walking or climbing stairs.
- **Self-care**: difficulty bathing or dressing.
- **Independent living**: difficulty doing errands alone.
- **Communication**: difficulty communicating, understanding others, or being understood.
- **Intellectual or Development Disability**: characterized by limitations in intellectual functioning and adaptive behavior originating before age 18 or Developmental (broad range of conditions due to an impairment in physical, learning, language, or behavior areas) originating before age 22.

Sources:

1. How Disability Data are Collected from The American Community Survey

2. WG Short Set on Functioning (WG-SS) - The Washington Group on Disability Statistics

1.17 Epidemiology Laboratory Repeating Group

Test Performed: This field corresponds to the OBX-3 field in the Electronic Laboratory Reporting (ELR) Implementation Guide.

Test Method: The field corresponds to OBX-17 in the Electronic Laboratory Reporting (ELR) Implementation Guide. If the test method is available, this field should be populated regardless of whether the provided Test Performed (INV290) value contains a test method.

Test Result: This field corresponds to the OBX-5 field in the Electronic Laboratory Reporting (ELR) Implementation Guide.

Test Result Units of Measure: This field corresponds to the OBX-6 field in the Electronic Laboratory Reporting (ELR) Implementation Guide.

Test Result Reference Range: This field corresponds to the OBX-7 field in the Electronic Laboratory Reporting (ELR) Implementation Guide.

Test Result Interpretation Flag: This field corresponds to the OBX-8 field in the Electronic Laboratory Reporting (ELR) Implementation Guide.

Specimen Type: This field corresponds to SPM-4 field in the Electronic Laboratory Reporting (ELR) Implementation Guide. If the SPM-4 field of a received ELR message contains data that describe both the specimen type (e.g., blood, urine) and the specimen source site (e.g., nasopharynx, skin), it is acceptable to transmit this information to CDC in its current, combined format; i.e., the full content of the SPM-4 field can be sent to the CDC as is for this data element.

Specimen Source Site: This field corresponds to SPM-8 field in Electronic Laboratory Reporting (ELR) Implementation Guide.

Performing Lab Specimen ID: This field corresponds to SPM-2.2 field in Electronic Laboratory Reporting (ELR) Implementation Guide. This data element to be populated if sending parent/child results to CDC. If not sending parent/child results to CDC, this data element does not need to be populated. If reporting results to CDC and are unable to populate this field with the lab's specimen ID for regulatory reasons, please populate with a different text value, such as a hashed ID, so that parent/child results test can still be connected.

Specimen Collection Date/Time: Within an electronic laboratory result, information on Specimen Collection Date/Time could come from (Specimen Collection Date/Time (SPM-17), Specimen Collection Date (OBX-14), or Observation Date/Time (OBR-7).

Date/Time of Lab Result: In systems with two distinct dates for Date/Time of Lab Result and Specimen Analyzed Date/Time, values representing the date the lab result was reported should be used to populate Date/Time of Lab Result. In an electronic laboratory result, Results Rpt/Status Chng Date/Time (OBR-22) should typically match Date/Time of Lab Result but may differ if the reporting lab sends an updated result, which would update the value of OBR-22.

1.18 Industry and Occupation

For "Current Employment Status," consider the person's self-reported economic relationship to work. Specifically:

- "Employed" includes individuals working for pay. This includes someone who is retired or a student and is also working for pay. Volunteer work should not be classified as "Employed".
- "Unemployed" refers to individuals who are not currently employed but are actively seeking employment.
- "Not in Labor Force" includes individuals who are not working and not actively seeking employment, such as retired persons or students (if not working for pay and not seeking employment).
- "Unknown" should be used when the person's employment status cannot be determined.

For the repeating group, the free text for Current Industry is lower priority for transmission to CDC than the standardized code.

Volunteer work should be included in Current Industry and Current Occupation if the volunteer work is as an emergency/first responder, or if the volunteer work is at least 20 hours/week.

For further information on the Standard Occupational Classification and North American Industry Classification System value sets, please see: About Classification Systems | Occupation and Industry Data | CDC

2.0 Reporting Susceptibility Test Results

In the Generic v3 Implementation Guides, phenotypic and genotypic antimicrobial susceptibility test results are sent using the same Epidemiology Laboratory Repeating Group as all other test types, rather than using a separate repeating group.

Typically, antimicrobial susceptibility testing includes a culture test followed by a series of tests to determine the susceptibility of the organism to specific antimicrobials. Similar to ELR, the

connection of the culture to the susceptibilities is a "parent-child" relationship, where the culture is the parent result, and the susceptibilities are the child results. This means that there can be many child results for a single parent result. (HL7 Version 2.5.1 IG: Electronic Lab Reporting to Public Health, DSTU R2, Release1.1 - US Realm).

In ELR, the relationship between parent and child results is defined using a complex combination of Sub-IDs and parent and child OBR segments which make it clear the exact organism that susceptibility tests were performed. In the Generic v3 MMG, each parent and child result is sent as a separate instance of the Epidemiology Laboratory Repeating Group. An instance of the repeating group is defined by the unique value in OBX-4. The parent-child relationship is defined by including the Performing Lab Specimen ID of the parent result (culture result) in each child result (susceptibility results). Adding more detail, in a scenario where a single organism is identified from a culture test, the parent instance should contain an OBX segment with the Performing Lab Specimen ID (OBX-3=LAB202) and each child result should also contain an OBX segment with the same Performing Lab Specimen ID (OBX-3=LAB202).

Instances of susceptibility results should contain at minimum the test performed, the test result, and Performing Lab Specimen ID, but can contain any data elements from the repeating block. The result can be either an interpretation of a result (ex. OBX|283|CWE|18934-0^Isoniazid^LN |n|10|30714006^Resistant^SCT ||||||F) or the actual result (ex. OBX|n|SN|7002-9^CIPROFLOXACIN^LN |n|^0.05|ug/mL^^UCUM||S|||F)For jurisdictions unable to transmit the original Performing Lab Specimen ID for regulatory reasons, please populate with a different text value, such as a hashed ID, so that parent-child relationship can still be conveyed.

Scenario #1: Susceptibility testing on a culture with a single organism

Let us assume a specimen was collected from urethral source on 11/01/2024 and was assigned a specimen ID of 123456. *Neisseria gonorrhoeae* was the only organism detected in the aerobic culture. Follow-up susceptibility testing indicated that the organism was resistant to azithromycin and was susceptible to penicillin V. In this case, Instance 1 of the repeating group is the parent result with *Neisseria gonorrhoeae* cultured from the collected specimen. Instances 2-3 represent the different susceptibility tests performed on the identified organism from instance 1. To associate each susceptibility test result with the parent result, the same performing Lab Specimen ID is included each instance of the repeating group.

Instance 1: Parent *Neisseria gonorrhoeae* Culture

Data Element Name	**Example segment**
Test Performed	OBX|1|CWE|INV290^Test Performed^PHINQUESTION|1|634-6^Bacteria Spec Aerobe Cult^LN||||||F
Test Result	OBX|2|CWE|INV291^Test Result^PHINQUESTION|1|68704007^Neisseria gonorrhoeae^SCT||||||F
Test Method	OBX|3|CWE|85069-3^Test Method^LN|1|0050^Aerobic Culture^OBSMETHOD||||||F
Specimen Type	OBX|4|CWE|66746-9 ^Specimen Type^LN|1|258530009^Urethral swab^SCT||||||F
Specimen Source Site	OBX|5|CWE|31208-2^Specimen Source Site^LN|1|13648007^Urethral structure^SCT||||||F
Performing Lab Specimen ID	OBX|6|TX|LAB202^Performing Laboratory Specimen ID^PHINQUESTION|1|123456||||||F

Instance 2: Child Azithromycin Susceptibility

Data Element Name	Example segment
Test Performed	OBX|7|CWE|INV290^Test Performed^PHINQUESTION|2|6981-5^Azithromycin Islt Grad Strip^LN||||||F
Test Result	OBX|8|CWE|INV291^Test Result^PHINQUESTION|2|30714006^Resistant^SCT||||||F
Test Method	OBX|9|CWE|85069-3^Test Method^LN|2|104234003^Gradient strip susceptibility test^SCT||||||F
Performing Lab Specimen ID	OBX|10|TX|LAB202^Performing Laboratory Specimen ID^PHINQUESTION|2|123456||||||F

Instance 3: Child Penicillin Susceptibility

Data Element Name	Example Segment
Test Performed	OBX|11|CWE|INV290^Test Performed^PHINQUESTION|3|18966-2^Penicillin V^LN||||||F
Test Result	OBX|12|CWE|INV291^Test Result^PHINQUESTION|3|131196009^Susceptible^SCT||||||F
Test Method	OBX|13|CWE|85069-3^Test Method^LN|3|0246^Minimum Inhibitory Concentration, microdilution^SCT||||||F
Performing Lab Specimen ID	OBX|14|TX|LAB202^Performing Laboratory Specimen ID^PHINQUESTION|3|123456||||||F

Scenario #2: Susceptibility testing on two cultures, both with a single organism

Let us assume, a specimen was collected from urethral source on 11/01/2024 and was assigned a specimen ID of 123456. A second specimen was collected from the same urethral source on 11/10/2024 and was assigned a specimen ID of 789345. For both specimens, *Neisseria gonorrhoeae* was the only organism detected in the aerobic culture. Follow-up susceptibility testing was conducted on both. In this case, instance 1 of the repeating group is the first *Neisseria gonorrhoeae* cultured with testing for ceftriaxone resistance of the specimen in instance 2. Instance 3 of the repeating group is the second *Neisseria gonorrhoeae* cultured with testing for gentamicin resistance of the specimen in instance 4.

Instance 1: First Parent *Neisseria gonorrhoeae* Culture

Data Element Name	Example segment
Test Performed	OBX|1|CWE|INV290^Test Performed^PHINQUESTION|1|634-6^Bacteria Spec Aerobe Cult^LN||||||F
Test Result	OBX|2|CWE|INV291^Test Result^PHINQUESTION|1|68704007^Neisseria gonorrhoeae^SCT||||||F
Test Method	OBX|3|CWE|85069-3^Test Method^LN|1|0050^Aerobic Culture^OBSMETHOD||||||F
Specimen Type	OBX|4|CWE|66746-9 ^Specimen Type^LN|1|258530009^Urethral swab^SCT||||||F
Specimen Source Site	OBX|5|CWE|31208-2^Specimen Source Site^LN|1|13648007^Urethral structure^SCT||||||F
Performing Lab Specimen ID	OBX|6|TX|LAB202^Performing Laboratory Specimen ID^PHINQUESTION|1|123456||||||F
Specimen Collection Date/Time	OBX|7|DTM|68963-8^Specimen Collection Date Time^LN|1|202411010930||||||F
Date/Time of Lab Result	OBX|8|DTM|82773-3^Date Time Lab Result^LN|1|202411021545||||||F

Instance 2: Child Ceftriaxone Susceptibility for First Parent *Neisseria gonorrhoeae* Culture

Data Element Name	Example Segment
Test Performed	OBX|9|CWE|INV290^Test Performed^PHINQUESTION|2| 141-2^Ceftriaxone Islt MIC^LN||||||F
Test Result	OBX|10|NM|INV291|3|64|ug/ML^MicroGramsPerMilliLiter^UCUM||R^Resistant^HL70078|||F
Test Method	OBX|11|CWE|85069-3^Test Method^LN|2|0246^Minimum Inhibitory Concentration, microdilution^SCT||||||F
Performing Lab Specimen ID	OBX|12|TX|LAB202^Performing Laboratory Specimen ID^PHINQUESTION|2|123456||||||F

Instance 3: Second Parent *Neisseria gonorrhoeae* Culture

Data Element Name	Example segment
Test Performed	OBX|13|CWE|INV290^Test Performed^PHINQUESTION|3|634-6^Bacteria Spec Aerobe Cult^LN||||||F
Test Result	OBX|14|CWE|INV291^Test Result^PHINQUESTION|3|68704007^Neisseria gonorrhoeae^SCT||||||F
Test Method	OBX|15|CWE|85069-3^Test Method^LN|3|0050^Aerobic Culture^OBSMETHOD||||||F
Specimen Type	OBX|16|CWE|66746-9 ^Specimen Type^LN|3|258530009^Urethral swab^SCT||||||F
Specimen Source Site	OBX|17|CWE|31208-2^Specimen Source Site^LN|3|13648007^Urethral structure^SCT||||||F
Performing Lab Specimen ID	OBX|18|TX|LAB202^Performing Laboratory Specimen ID^PHINQUESTION|3|789345||||||F
Specimen Collection Date/Time	OBX|19|DTM|68963-8^Specimen Collection Date Time^LN|3|202411101213||||||F
Date/Time of Lab Result	OBX|20|DTM|82773-3^Date Time Lab Result^LN|3|202411132018||||||F

Instance 4: Child Ceftriaxone Susceptibility for Second Parent *Neisseria gonorrhoeae* Culture

Data Element Name	Example Segment
Test Performed	OBX|37|CWE|INV290^Test Performed^PHINQUESTION |4|268-3^Gentamicin^LN||||||F
Test Method	OBX|39|CWE|85069-3^Test Method^LN |4|0062^Agar diffusion^OBSMETHOD||||||F
Test Result	OBX|38|NM|INV291^Test Result^PHINQUESTION |4|1.0|ug/ML^MicroGramsPerMilliLiter ^UCUM||S^Susceptible^HL70078|||F
Performing Lab Specimen ID	OBX|24|TX|LAB202^Performing Laboratory Specimen ID^PHINQUESTION|4|789345||||||F

3.0 Changes to Generic v2 Data Elements

Generic v2 Data Element Name	Generic v3 Data Element Name	Revision
Local Subject ID	Person ID	Revised name from 'Local Subject ID' to 'Person ID' per DSWG recommendation to more clearly differentiate Person ID from Case ID (formerly 'Local Subject ID' and 'Local Record ID,' respectively). Revised description from 'The local ID of the subject/entity' to 'The jurisdictional identifier that uniquely identifies the person.'
Birth Date	Birth Date	Revised description from 'Patient's date of birth' to 'Known or estimated year, month, and day of the person's birth' to align with USCDI.
Subject's Sex	Sex	Revised name from 'Subject's Sex' to 'Sex.' Revised description from 'Subject's current sex' to 'Person's sex.'
Country of Birth	Country of Birth	Revised description from 'Country of Birth' to 'The country in which the person was born.'
Other Birth Place	N/A	Removed data element. Rather than have as a separate data element, 'Other Birth Place' can be provided with as part of Country of Birth.
Subject Address County	Address County	Revised name from 'Subject Address County' to 'Address County.' Revised description from 'County of residence of the subject' to 'County of residence of the person at time of case counting date (CCD)' to clarify this data element is for the person's address at the time of the event.
Subject Address State	Address State	Revised name from 'Subject Address State' to 'Address State,' Revised description from 'State of residence of the subject' to 'State of residence of the person at time of case counting date (CCD)' to clarify this data element is for the person's address at the time of the event.
Subject Address ZIP Code	Address ZIP Code	Revised name from 'Subject Address ZIP Code' to 'Address Zip Code.' Revised description from 'ZIP Code of residence of the subject' to ' Zip Code of residence of the person at time of case counting date (CCD)' to clarify this data element is for the person's address at the time of the event.

Generic v2 Data Element Name	Generic v3 Data Element Name	Revision
Date of Illness Onset	Date of Onset of Signs or Symptoms	Revised name from 'Date of Illness Onset' to 'Date of Onset of Signs or Symptoms' per DSWG recommendations. Revision made to clarify this data element is only for symptom onset and does not include dates of diagnoses, laboratory test confirmation, or anything beyond symptom onset. Revised description from 'Date of the beginning of the illness. Reported date of the onset of symptoms of the condition being reported to the public health system.' to 'The earliest date of the onset of signs, symptoms, or other clinical manifestations relevant to the reported condition.'
Illness End Date, Illness Duration, Illness Duration Units	N/A	Removed data elements because they were populated in only ~0.5% of cases.
Pregnancy Status	Pregnancy Status	Revised description from 'Indicates whether the subject was pregnant at the time of the event.' to 'Pregnancy status of the case at the time of the event (CCD)' per DSWG recommendation.
Diagnosis Date	Clinical Diagnosis Date	Revised name from 'Diagnosis Date' to 'Clinical Diagnosis Date'. Revision made to clarify this data element is only for the identification of the condition by a clinician, and should not include laboratory or symptom onset dates. Revised description from 'Earliest date of diagnosis (clinical or laboratory) of condition being reported to public health system.' to 'The earliest date that the condition being reported to public health system was identified by a clinician as the final, suspected, or most likely diagnosis.'
Hospitalized	Hospitalized	Revised description from 'Was subject hospitalized because of this event?' to 'Indicator the person had one or more hospitalizations associated with the condition' per DSWG recommendation.
Admission Date, Discharge Date	Admission Date	Revised descriptions from 'Subject's most recent admission date/discharge date to the hospital for the condition covered by the investigation' to 'The date on which the person was admitted/discharged for hospitalization associated with the condition' per DSWG recommendation. Revised format from a single data element to a repeating group so that multiple hospitalizations may be entered, rather than only the most recent, as was done in generic v2.

Generic v2 Data Element Name	Generic v3 Data Element Name	Revision
Duration of Hospital Stay in Days	N/A	Removed data element due to low support from DSWG and because same information can be garnered from admission and discharge date, which are typically populated when Duration of Hospital Stay in Days is populated.
Subject Died	Person Deceased	Revised name from 'Subject Died' to 'Person Deceased.' Revised description from 'If the subject died from this illness or complications associated with this illness, indicate the date of death.' to 'Indicator that the person is deceased.' Added an implementation note stating 'This data element should be populated any time the person is determined to be deceased and has no implications about cause of death or if it is related to the reported condition.' Revised the identifier from '77978-5' to 'PID-30.'
Deceased Date	Deceased Date	Revised description from 'If the subject died from this illness or complications associated with this illness, indicate the date of death.' to 'Known or estimated year, month, and day of the patient's death' to align with USCDI. Added implementation note of 'This data element should be populated any time the person is determined to be deceased and has no implications about cause of death or if it is related to the reported condition.'
Local Record ID	Case ID	Revised name from 'Local Record ID' to 'Case ID' per DSWG recommendation to more clearly differentiate Person ID from Case ID (formerly 'Local Subject ID' and 'Local Record ID,' respectively). Revised description from 'Sending system-assigned local ID of the case investigation with which the subject is associated.' to 'The jurisdictional identifier that uniquely identifies the case (Event ID).'
State Case Identifier	N/A	Removed data element because it was very highly correlated with Local Subject ID/Local Record ID.
Legacy Case Identifier	N/A	Moved to Identifier repeating group, rather than be a stand-alone data element.
Age at Case Investigation	Age	Revised name from 'Age at Case Investigation' to 'Age.' Revised description from 'Subject age at time of case investigation' to 'Person's age at time of case counting date (CCD).'

Generic v2 Data Element Name	Generic v3 Data Element Name	Revision
Age Unit at Case Investigation	Age Units	Revised name from 'Age Unit at Case Investigation' to 'Age Units.' Revised description from 'Subject age unit at time of case investigation' to 'Units for person's age at time of case counting date (CCD).'
Imported Country, Imported State, Imported City, Imported County	N/A	Removed data element because it was populated in only ~0.1% of cases.
Country of Exposure	Country of Exposure	Revised from a repeating group to a repeating element as the rest of Repeating Variables for Disease Exposure were removed.
State or Province of Exposure, City of Exposure, County of Exposure	N/A	Removed data elements because they were populated in only ~0.3% of cases.
Transmission Mode	N/A	Removed data element because it was only populated ~5% of the time and because had received feedback this data element was often hard coded based on condition.
Immediate National Notifiable Condition	N/A	Removed data element because whether a condition is immediately notifiable is based on the condition which is already provided in Condition Code.
Case Outbreak Indicator	N/A	Removed as duplicative with other outbreak-related data elements, such as Outbreak Case Status.
Case Outbreak Name	State Outbreak Name	Revised name from 'Case Outbreak Name' to ‘State Outbreak Name’ for clarity.
Jurisdiction Code	N/A	Removed data element as the concept was unclear and lacked broad understanding.
Reporting Source Type Code, Reporting Source Zip Code	N/A	Removing data elements because of limited use across CDC programs and high burden noted by jurisdictions. Will instead be included in condition-specific context.
Binational Reporting Criteria	Binational Reporting Criteria	Revised description from 'For cases meeting the binational criteria, select all the criteria which are met.' to 'Binational reporting criteria identifies cases that involve cross-border exposure, residence, contact, or products linked to Mexico or Canada, to support coordinated international public health response. For cases meeting the binational criteria, select all the criteria which are met.'

Generic v2 Data Element Name	Generic v3 Data Element Name	Revision
Case Investigation Start Date	N/A	Removed data element due to many other prioritized dates already being collected for each case.
Date First Electronically Submitted	DateTime First Electronically Submitted to CDC	Revised name from 'Date First Electronically Submitted' to 'DateTime First Electronically Submitted to CDC.' Revised description from 'Date/time the notification was first electronically sent to CDC. This value does not change after the original notification.' to 'DateTime a notification for this case was first electronically sent to CDC. This value DOES NOT change after the original notification.'
Date of Electronic Case Notification to CDC	DateTime of Electronic Case Notification to CDC	Revised name from 'Date of Electronic Case Notification to CDC' to 'DateTime of Electronic Case Notification to CDC.' Revised description from ‘Date/time this version of the electronic case notification was sent. It will be the same value as NOT103 for the original notification. For updates, this is the update/send date/time.’ to ‘DateTime a notification for this case was last electronically sent to CDC. This value DOES change after the original notification to reflect the current datetime.'
Date Reported	N/A	Removed data element because new data elements of Date First Received by Public Health Agency, Date First Received by State Health Agency, and Date First Received by Local Health Agency better capture dates the health department was made aware of the case.
Earliest Date Reported to County	Date First Received by Local Health Agency	Revised name from 'Earliest date reported to County' to 'Date First Received by Local Health Agency' per DSWG recommendation. Revised description from 'Earliest date reported to county public health system.' to 'The earliest date a report for the case was received by the local or tribal public health agency in the jurisdiction counting the case.'
Earliest Date Reported to State	Date First Received by State Health Agency	Revised name from 'Earliest date reported to State' to 'Date First Received by State Health Agency' per DSWG recommendation. Revised description from 'Earliest date reported to state public health system.' to 'The earliest date a report for the case was received by the state public health agency for the jurisdiction counting the case.'

Generic v2 Data Element Name	Generic v3 Data Element Name	Revision
MMWR Week	MMWR Week	Revised description from 'MMWR Week for which case information is to be counted for MMWR publication.' to 'MMWR Week for which case information is to be counted for MMWR publication. MMWR Week to be based on case counting date (CCD).'
MMWR Year	MMWR Year	Revised description from 'MMWR Year (YYYY) for which case information is to be counted for MMWR publication.' to 'MMWR Year (YYYY) for which case information is to be counted for MMWR publication. MMWR Year to be based on case counting date (CCD).'
Date CDC Was First Verbally Notified of This Case	N/A	Removed data element because it was populated in less than 0.1% of cases.
Date First Reported to PHD	Date First Received by Public Health Agency	Revised name from 'Date First Reported to PHD' to 'Date First Received by Public Health Agency' per DSWG recommendation. Revised description from 'Date the report was first sent to the public health department (local, county, or state) by reporter (physician, lab, etc.).' to 'The earliest date a report for the case was received by any public health agency, whether a state/territory or county/local agency, within the jurisdiction in which the case will be counted. Reports may include phone calls and any other mechanisms accepted by the agency.'
Reporting State	N/A	Removed data element as provided values have very high correlation with National Reporting Jurisdiction data element.
Reporting County	N/A	Removed data element due feedback that it was difficult to implement for states without counties or centralized health departments.

4.0 Data Elements Added to Generic v3

4.1 Data Elements Added to Generic v3 from Case Notification Minimal Data Necessary (MDN)

(Includes content standardized by CSTE Data Standardization Working Group and used in MDN)

Outbreak Case Status

CDC Outbreak Name

Case Counting Date

Date First Received by Public Health Agency

Indicator of Signs or Symptoms

Earliest Specimen Collection Date Associated with a Positive Lab Result

Earliest Result Date of a Positive Lab Result

Death Associated with Condition

Disability Type

Disability Type Indicator

Exposure

Exposure Indicator

First Date of Exposure

Last Date of Exposure

Signs and Symptoms

Signs and Symptoms Indicator

Underlying Health Condition

Underlying Health Condition Indicator

Test Performed *(Test Type in MDN)*

Test Result

Test Result Units of Measure *(Test Result Units in MDN)*

Test Result Reference Range

Specimen Type

Current Occupation

Current Occupation Standardized

Current Industry

Current Industry Standardize

4.2 Data Elements Added to Generic v3 from CSTE Data Standardization Working Group Recommendation

Preferred Language

Estimated Date of Delivery (EDD)

Housing Status

Primary Living Situation

Education

Admitted to Intensive Care Unit

Identifier

Identifier Value

Current Employment Status

Medication

Date Medication Prescribed

Medication Prescribed Duration

Date Medication Started

Date Medication Ended

Specify Different Travel Exposure Window

International Travel

Domestic Travel

International Destination(s) of Recent Travel

Travel State

Date of Arrival to Travel Destination

Date of Departure from Travel Destination

Reason For Travel

Ever Vaccinated Against This Disease

Vaccine Type

Vaccine Administered Date

Vaccine Manufacturer

Vaccine Event Information Source

Vaccination Doses Prior to Case Counting Date

Date of Last Dose Prior to Case Counting Date

Specimen Source Site

Specimen Collection Date/Time

Date/Time of Lab Result

Sources

1. https://ndc.services.cdc.gov/wp-content/uploads/2021/02/11-SI-04.pdf
2. https://ndc.services.cdc.gov/supporting-documents-for-implementation/
3. https://ndc.services.cdc.gov/event-codes-other-surveillance-resources/
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10. https://cdn.ymaws.com/www.cste.org/resource/resmgr/briefs/DSWG_Dates_of_PH_Importance_.pdf