Chlamydia v1
Definition Factsheet & Technical Brief

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Definition Description: This definition is used to identify emergency department visits related to chlamydial infections caused by the bacteria *Chlamydia trachomatis*. Chlamydial infections are among the most common sexually transmitted infections (STIs) worldwide. Repeat infections are widely reported. Infections are often asymptomatic but can cause serious reproductive harm in women, including pelvic inflammatory disease, ectopic pregnancy and infertility. Chlamydia is a nationally notifiable disease that is reportable to the Centers for Disease Control and Prevention (CDC). The use of syndromic data to identify pre-diagnoses of chlamydia in emergency departments can complement and enhance current STI surveillance methods. Currently, there is no syndrome definition using Electronic Health Record data for chlamydia currently available in NSSP's instance of Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE). This is the first iteration of a definition for chlamydia; it may be further improved upon by the NSSP Community of Practice in the future. This query is intended to be narrow and capture visits with specific terms to support greater monitoring and actionable public health data. More complex and/or extensive queries may exist that more broadly capture symptoms or other terms.

Please note that the queries are developed using chlamydia-related free text terms from chief complaint fields; International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Tenth Revision, Clinical Modification (ICD-10-CM) discharge diagnosis codes; and Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) as the basis for identifying patient visits of interest, and not the Council of State and Territorial Epidemiologists (CSTE) chlamydia surveillance case definition. The queried patient visits may or may not represent data for a case patient included in National Notifiable Diseases Surveillance System (NNDSS) case data, and further public health investigation may be required.

Key Notes

This case definition is intended for surveillance and public health reporting and may not fully align with clinical diagnosis or management or disease intervention practices. This definition should not be used for individual patient management or for determining the types of partner services interventions that should be implemented.

Citations

1. CSTE. **Chlamydia Trachomatis Infection (2022 Case Definition).** Available at: https://ndc.services.cdc.gov/case-definitions/chlamydia-trachomatis-infection-2022/
2. CDC. **About Chlamydia**. Available at: https://www.cdc.gov/chlamydia/about/index.html

New or Revised Definition: New Definition

Date Added to ESSENCE: October 2026

Use Cases for Definition:
Case-finding: Tertiary
Trend monitoring: Primary
Early outbreak detection: Secondary
Emergent condition: Not Intended as Use Case

Justification: There is no syndrome definition for chlamydia currently available in ESSENCE. CDC wants to use emergency department (ED) data to monitor trends.

Data Source During Development: ED Visits. Chief Complaint Query Validation dataset (CCQV) in ESSENCE.

Validation Methods: Select members of the NSSP Community of Practice were asked to review line-level results for their jurisdictions and provide feedback to ensure the intended results of the definitions were met. New Mexico ran this query against ED visits from January through August 2024. Alaska ran the query against emergency department visits from June 2024 through February 2025.

Validation Results: In New Mexico, this query returned 173 visit records. Among these, 75% were classified as probable (n = 130), 8% (n = 14) as undetermined, and 17% (n = 29) as ruled out. In Alaska, this query returned 100 visit records. Among these, 85% (n = 85) were classified as probable and 15% (n = 15) as ruled out.

Limitations:
1) Chief complaint (CC) text presents interpretation challenges. Because negations apply only to CC, the Discharge Diagnosis (DD) codes A74 (Other diseases caused by chlamydiae), A55 (Chlamydial lymphogranuloma), and A56 (Other sexually transmitted chlamydial diseases) return many results for visits related to “soft tissue injury”, “STD exposure”, and requests for STD testing.
2) Additionally, CC updates sometimes include “STD check,” which may appear as an initial complaint before being revised, potentially leading to misclassification. Visits may also represent patients returning for treatment. Some visits also reflect follow-up care for recent diagnoses (e.g., “screening last week, told to return”). These repeat encounters may result in multiple visits for the same underlying infection and could overestimate visit counts.

Definition Fields and Structure:
The Chief Complaint Discharge Diagnosis (CCDD) parsed field is used to query both the discharge diagnosis codes and chief complaint free text, and exclusions are incorporated as necessary.

- Inclusion based on chief complaint free text terms:
    - The visit is included if it contains:
        1. A chief complaint related to chlamydia trachomatis infection – (“chlam”, or, trachoma, or , lymphogranuloma, or, pelvic inflammatory disease, or, pid) ***AND***
- Exclusion based on chief complaint free text terms:
    - A chief complaint is not included if it contains:
        1. A chief complaint denying infection or requesting evaluation without a positive diagnostic code – ("does not", or, "negative for", or, "d[en][en]ie[sd] chlam", or, "deny chlam", or, "vaccine", or, "screen", or, "sexually transmitted disease check", or, "st[id] check", or, "st[id] test", or, "wellness check", or, "wants to be test", or, "wants to be check", or, "wants test", or, "wants check", or, "wants to get check", or, "wants to get test", or, "wellness visit", or, "establish care", or, "well visit", or, "sexually transmitted disease testing", or, "sexually transmitted disease shot", or, "sexually transmitted disease check", or, "sexually transmitted disease screening", or, "exposure to", or, "sexually transmitted disease evaluation", or, "sexually transmitted disease exposure", or, "possible exposure", or, "med eval", or, "medical eval", or, "sexually transmitted disease concern", or, "sexually transmitted disease check", or, "sexually transmitted disease test", or, "soft tissue injury test", or, "soft tissue injury check", or, "soft tissue injury screen", or, "exposure to soft tissue injury", or, "soft tissue injury exposure", or, "soft tissue injury concern", or, "soft tissue injury anxiety", or, "soft tissue injury came for shot", or, "soft tissue injury", or, "exposed to soft tissue injury", or, "deep soft tissue injury") **OR**
- Inclusion based on ICD-9 discharge diagnosis codes related to chlamydia trachomatis infection:
    - The visit is included if it contains:
        1. A discharge diagnosis code related to trachoma – (076.0 or 076.1 or 076.9) ***OR***

2. A discharge diagnosis code for chlamydial conjunctivitis – (077.98) ***OR***
3. A discharge diagnosis code related to other specified or unspecified chlamydial infection – (078.88 or 079.88 or 079.98) ***OR***
4. A discharge diagnosis code related to lymphogranuloma – (099.1) ***OR***
5. A discharge diagnosis code related to chlamydial urethritis – (099.41) ***OR***
6. A discharge diagnosis code for other venereal diseases due to chlamydia trachomatis – (099.50 or 099.51 or 099.52 or 099.53 or 099.54 or 099.55 or 099.56 or 099.59) ***OR***

- Inclusion based on ICD-10 discharge diagnosis codes related to chlamydia trachomatis infection:
  - The visit is included if it contains:
    1. A discharge diagnosis code related to lymphogranuloma – (A55) ***OR***
    2. A discharge diagnosis code related to other sexually transmitted chlamydial diseases – (A56) ***OR***
    3. A discharge diagnosis code related to trachoma - (A71) ***OR***
    4. A discharge diagnosis code related to other diseases caused by chlamydiae - (A74) ***OR***
- Inclusion based on SNOMED discharge diagnosis codes related to chlamydia trachomatis infection:
  - The visit is included if it contains:
    1. A discharge diagnosis code related to chlamydial infection - (105629000) ***OR***
    2. A discharge diagnosis code related to chlamydia trachomatis infection - (240589008)
- There are no exclusions in this query applied to diagnostic codes. Exclusion terms mentioned above apply only to chief complaint terms and an encounter is included if it contains any of the above-mentioned diagnostic codes.

Plain Language Description

The definition uses discharge diagnosis codes and free-text chief complaint terms. The definition requires that an emergency department visit contains a reference to the condition by its discharge diagnosis code (in at least one of the following: ICD-9-CM, ICD-10-CM, SNOMED diagnostic codes), or by the condition name listed in the chief complaint text. Therefore, the Chlamydia v1 syndromic surveillance definition includes ICD-9-CM, ICD-10-CM, and SNOMED diagnostic codes for infection with *Chlamydia trachomatis*, along with direct mentions of chlamydia (including misspellings) in chief complaint text.

Detailed Definition Components

Table 1: Inclusion terms: International Classification of Disease, Ninth Revision, Clinical Modification (ICD-9-CM)

Terms	Description
076.0	Trachoma, initial stage
076.1	Trachoma, active stage
076.9	Trachoma, unspecified
077.98	Unspecified diseases of conjunctiva due to chlamydiae
078.88	Other specified diseases due to chlamydiae
079.88	Other specified chlamydial infection
099.1	Lymphogranuloma venereum
099.41	Other nongonococcal urethritis, chlamydia trachomatis
099.50	Other venereal diseases due to chlamydia trachomatis, unspecified site
099.51	Other venereal diseases due to chlamydia trachomatis, pharynx
099.52	Other venereal diseases due to chlamydia trachomatis, anus and rectum
099.53	Other venereal diseases due to chlamydia trachomatis, lower genitourinary sites
099.54	Other venereal diseases due to chlamydia trachomatis, other genitourinary sites
099.55	Other venereal diseases due to chlamydia trachomatis, unspecified genitourinary site
099.56	Other venereal diseases due to chlamydia trachomatis, peritoneum
099.59	Other venereal diseases due to chlamydia trachomatis, other specified site

Table 2: Inclusion and exclusion terms: International Classification of Disease, Tenth Revision, Clinical Modification (ICD-10-CM)

Terms	Description
A55	Chlamydial lymphogranuloma (venereum)
A56	Other sexually transmitted chlamydial diseases
A71	Trachoma
A74	Other diseases caused by chlamydiae

Table 3: Inclusion terms: SNOMED Concepts

Terms	Description
105629000	Chlamydial infection
240589008	Chlamydia trachomatis infection

Table 4: Inclusion terms: Chief Complaint

Description
"chlam", or, "trachoma", or, "lymphogranuloma", or, "pelvic inflammatory disease", or, "pid"

Table 5: Exclusion terms: Chief Complaint

Chief Complaint
"does not", or, "negative for", or, "d[en][en]ie[sd] chlam", or, "deny chlam", or, "vaccine", or, "screen", or, "sexually transmitted disease check", or, "st[id] check", or, "st[id] test", or, "wellness check", or, "wants to be test", or, "wants to be check", or, "wants test", or, "wants check", or, "wants to get check", or, "wants to get test", or, "wellness visit", or, "establish care", or, "well visit", or, "sexually transmitted disease testing", or, "sexually transmitted disease shot", or, "sexually transmitted disease screening", or, "exposure to ", or, "sexually transmitted disease evaluation", or, "possible exposure", or, "med eval", or, "medical eval", or, "sexually transmitted disease exposure", or, "sexually transmitted disease concern", or, "sexually transmitted disease check", or, "sexually transmitted disease test", or, "soft tissue injury test", or, "soft tissue injury check", or, "soft tissue injury screen", or, "exposure to soft tissue injury", or, "soft tissue injury exposure", or, "soft tissue injury concern", or, "soft tissue injury anxiety", or, "soft tissue injury came for shot", or, "soft tissue injury", or, "exposed to soft tissue injury", or, "deep soft tissue injury"

Table 6: ESSENCE syntax for Chlamydia definition

Search the CC and DD Parsed Free Text:
^;A55^,or,^;A56^,or,^;A71^,or,^;A74^,or,^;076[019];^,or,^;07798;^,or,^;07888;^,or,^;07988;^,or,^;07998;^,or,^;0991;^,or,^;09941;^,or,^;0995[01234569];^,or,^;105629000;^,or,^;240589008;^,or,(,^chlam^,or,^trachoma^,or,^lymphogranuloma^,or,^pelvic inflammatory disease^,or,!pid!,),andnot,(,^does not^,or,^negative for^,or,^d[en][en]ie[sd]^chlam^,or,^deny^chlam^,or,^vaccine^,or,^screen^,or,^sexually transmitted disease check^,or,^st[id] check^,or,^st[id] test^,or,^wellness check^,or,^wants to be test^,or,^wants to be test^,or,^wants to be check^,or,^wants test^,or,^wants check^,or,^wants to get check^,or,^wants to get test^,or,^wellness visit^,or,^establish care^,or,^well visit^,or,^sexually transmitted disease testing^,or,^sexually transmitted disease shot^,or,^sexually transmitted disease screening^,or,^exposure to ^,or,^sexually transmitted disease evaluation^,or,^possible exposure^,or,^med eval^,or,^medical eval^,or,^sexually transmitted disease exposure^,or,^sexually transmitted disease concern^,or,^sexually transmitted disease check^,or,^sexually transmitted disease test^,or,^soft tissue injury test^,or,^soft tissue injury check^,or,^soft tissue injury screen^,or,^exposure to soft tissue injury^,or,^soft tissue injury exposure^,or,^soft tissue injury concern^,or,^soft tissue injury anxiety^,or,^soft tissue injury came for shot^,or,^soft tissue injury^,or,^exposed to soft tissue injury^,or,^deep soft tissue injury^,)