Trichinellosis v1 Definition Factsheet & Technical Brief

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<u>Definition Purpose</u>: Created by the CDC National Syndromic Surveillance Program (NSSP) for use with emergency department data to develop queries for all National Notifiable Diseases defined by the National Notifiable Disease Surveillance System (NNDSS). Please note that while the disease queries are developed using the NNDSS case definition as the basis for identifying patient visits of interest, the queried patient visits themselves may or may not represent a case patient in NNDSS and further public health investigation will most often be required. This query is intended to be a version 1 and 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 broader queries may exist that more broadly capture symptoms or travel-based terms.

New or Revised Definition: New Definition

Date Added to ESSENCE: February 2025

<u>Definition Description</u>: Designed to capture emergency department visits with a diagnostic code or textual indicator of possible trichinellosis.

Use-Cases for Definition:

 \boxtimes Case-finding

□ Trend monitoring

 \boxtimes Early outbreak detection

<u>Justification</u>: No query definition exists for trichinellosis. CDC wants to use emergency department data to monitor trends.

<u>Data Source During Development</u>: Emergency Department Visits. Chief Complaint Query Validation dataset (CCQV) in ESSENCE.

Development Methods:

1. The CDC team used the NNDSS case definition of trichinellosis to identify diagnostic codes (International Classification of Diseases, 9th & 10th Revision (ICD-9-CM, ICD-10-CM), SNOMED Clinical Terms (CT)) and chief complaint free-text for syndrome development.

2. The codes and free text were then categorized as inclusion or exclusion terms. These terms were formatted for querying in ESSENCE.

3. Text analysis was conducted on the initial query to find additional inclusion or exclusion terms.

4. The query was cross-checked internally as NSSP and by CDC subject matter experts as needed.

<u>Validation Methods</u>: This definition is part of the collection of definitions created by CDC NSSP for the rapid reportables project. The rapid reportables project is led by the CDC NSSP team to create definitions for all nationally reportable diseases. These definitions focus on chief complaint text and diagnostic codes of the disease or its causative agents with no mention of symptoms. Select members of the Community of Practice were then asked to review line-level results for their jurisdictions and provide feedback to ensure the intended results of the definitions were met.

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 trichinellosis chief complaint free text terms:
 - The visit is included if it contains:
 - 1. A chief complaint related to disease name ("Trichin") **OR**
- Inclusion based on ICD-10 discharge diagnosis codes related to trichinellosis:
 - The visit is included if it contains:
 - 1. A discharge diagnosis code of Trichinellosis (B75) OR
- Inclusion based on SNOMED discharge diagnosis codes related to trichinellosis:
 - The visit is included if it contains:
 - A discharge diagnosis code of an infection caused by larvae of the genus Trichinella

 (709018004 or 88264003 or 1177049006 or 1177052003 or 1177050006 or
 1177048003 or 1177051005 or 1177046004) OR
 - 2. A discharge diagnosis code of trichinosis (240117006 or 240867002 or 240868007 or 233747001) **OR**
 - A discharge diagnosis code of an infection caused by a disease agent of the genus Trichinella – (721830003) ANDNOT
- All the above must exclude:
 - An ICD-10 discharge diagnosis code for Trichomoniasis (A59) OR
 - An ICD-10 discharge diagnosis code for Contact with and (suspected) exposure to infections with a predominantly sexual mode of transmission – (Z20.2) OR
 - An ICD-10 discharge diagnosis code for Acute vaginitis (N76.0) OR
 - An ICD-10 discharge diagnosis code for Urinary tract infection, site not specified (N39.0) OR
 - A chief complaint term related to symptoms of trichomoniasis ("sexually transmitted disease" or "vagin" or "urin")

Detailed Definition Components **Table 1.** Inclusion and exclusion terms.

Variable Type	Terms	Description
		Inclusions
Discharge	B75	Trichinellosis
Diagnosis:		
ICD-10-CM		
Discharge Diagnosis: SNOMED concepts	709018004	Infection caused by larvae of <i>Trichinella</i> (disorder)
	88264003	Infection caused by larvae of Trichinella spiralis (disorder)
	240117006	Trichinosis myositis (disorder)
	240867002	Invasive trichinosis (disorder)
	240868007	Migratory trichinosis (disorder)
	721830003	Infection caused by Trichinella (disorder)
	233747001	Diaphragmatic trichiniasis (disorder)
	1177049006	Infection caused by larvae of Trichinella papuae (disorder)
	1177052003	Infection caused by larvae of Trichinella murelli (disorder)
	1177050006	Infection caused by larvae of Trichinella nativa (disorder)
	1177048003	Infection caused by larvae of Trichinella nelsoni (disorder)
	1177051005	Infection caused by larvae of Trichinella britovi (disorder)
	1177046004	Infection caused by larvae of Trichinella pseudospiralis (disorder)
Chief Complaint Terms	"Trichin"	
		Exclusions
Discharge	A59	Trichomoniasis
Diagnosis: ICD-10-CM	Z20.2	Contact with and (suspected) exposure to infections with a
		predominantly sexual mode of transmission
	N76.0	Acute vaginitis
	N39.0	Urinary tract infection, site not specified
Chief Complaint Terms	"sexually transmitted disease"	
	"vagin"	
	"urin"	

Table 2. ESSENCE syntax

(,^Trichin^,OR,^;B75^,OR,^;709018004;^,OR,^;88264003;^,OR,^;240117006;^,OR,^;240867002;^,OR,^; 240868007;^,OR,^;721830003;^,OR,^;233747001;^,OR,^;1177049006;^,OR,^;1177052003;^,OR,^;1177 050006;^,OR,^;1177048003;^,OR,^;1177051005;^,OR,^;1177046004;^,OR,^;88264003;^,),ANDNOT,(,^; A59^,OR,^;Z202^,OR,^sexually transmitted disease^,OR,^vagin^,OR,^urin^,OR,^;N760^,OR,^;N390^,)