

Giardiasis v1

Definition Factsheet & Technical Brief

Authors: Andzelika Rzucidlo, MPH^{1,2}, Dylan Johns, MS^{1,3}, Brittany Yarnell⁴, Brittany Eziam, MPH⁵, Jessica Scultz, MPH⁵, Caleb Wiedeman, MPH⁵, Katharina L. van Santen, MSPH¹,

¹ CDC Office of Public Health Data, Surveillance, and Technology (OPHDST), Immediate Office of the Director (IOD), Integrated Monitoring Branch

² InductiveHealth

³ ICF

⁴ Nebraska Department of Health and Human Services

⁵ Tennessee Department of Health

Points of contact:

nssp@cdc.gov

Definition Purpose: 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

Definition Description: Designed to capture emergency department visits with a diagnostic code or textual indicator of possible giardiasis.

Use-Cases for Definition:

- ☒ Case-finding
- ☒ Trend monitoring
- ☒ Early outbreak detection

Justification: No query definition exists for giardiasis. CDC wants to use emergency department data to monitor trends.

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

Development Methods:

1. The CDC team used the NNDSS case definition of giardiasis 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.

Validation Methods: 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 giardiasis chief complaint free text terms:
 - The visit is included if it contains:
 1. A chief complaint related to disease name – (“giardia”) **OR**
 2. A chief complaint related to alternative disease names – (“lambliasis” or “beaver fever”) **OR**
- Inclusion based on ICD-10 discharge diagnosis codes related to giardiasis:
 - The visit is included if it contains:
 1. A discharge diagnosis code for Giardiasis – (A07.1) **OR**
- Inclusion based on ICD-9 discharge diagnosis codes related to giardiasis:
 - The visit is included if it contains:
 1. A discharge diagnosis code for Giardiasis – (007.1) **OR**
- Inclusion based on SNOMED discharge diagnosis codes related to giardiasis:
 - The visit is included if it contains:
 1. A discharge diagnosis code for Giardiasis – (58265007) **OR**
 2. A discharge diagnosis code for conditions caused by Giardiasis – (10679007 or 1193805002 or 1163109001 or 1163081002 or 1193804003)
- All of the above must exclude:
 - A chief complaint related to history of Giardiasis – (“history giardia”, “history of giardia”)

Detailed Definition Components

Table 1. *Inclusion and exclusion terms.*

Variable Type	Terms	Description
<i>Inclusions</i>		
Discharge Diagnosis: ICD-10-CM	A07.1	Giardiasis [lambliasis]
Discharge Diagnosis: ICD-9-CM	007.1	Giardiasis
Discharge Diagnosis: SNOMED concepts	58265007	Giardiasis (disorder)
	10679007	Infection caused by <i>Giardia lamblia</i> (disorder)
	1193805002	Inflammation of intestine caused by <i>Giardia lamblia</i> (disorder)
	1163109001	Colitis caused by <i>Giardia lamblia</i> (disorder)
	1163081002	Duodenitis caused by <i>Giardia lamblia</i> (disorder)
	1193804003	Inflammation of small intestine caused by <i>Giardia lamblia</i> (disorder)
Chief Complaint Terms	"giardia"	
	"lambliasis"	
	"beaver fever"	
<i>Exclusions</i>		
Chief Complaint Terms	"history giardia"	
	"history of giardia"	

Table 2. *ESSENCE* syntax

(,^giardia^,OR,^lambliasis^,OR,^beaver fever^,OR,^;A071^,OR,^;0071^,OR,^;58265007;^,OR,^;10679007;^,OR,^;1193805002;^,OR,^;11631090 01;^,OR,^;1163081002;^,OR,^;1193804003;^),ANDNOT,(^history giardia^,OR,^history of giardia^,)
