

CDC Measles CCDD v1
Definition Factsheet & Technical Brief

Authored by the National Syndromic Surveillance Program Community of Practice

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Definition Description: To assist state, local, tribal, territorial, and federal public health practitioners in monitoring emergency department (ED) visits related to Measles.

New or Revised Definition: New

Date Added to ESSENCE: January 2019

Data Source During Development: Chief Complaint Query Validation (CCQV) data source

Validation Methods & Results: The query for this syndrome definition was iteratively developed by National Syndromic Surveillance Program analysts with a background in infectious diseases. This definition results in a small sample of visits and these visits were assessed in the Chief Complaint Query Validation data set. Issues and possible improvements were noted and adapted, resulting in a query using multiple misspellings as well as negations for unintended patient encounters. During validation, it was noted that a majority of encounters returned by this definition were due to measles-related free text terms and not discharge diagnosis codes.

Plain Language Description: The definition uses both chief complaint and discharge diagnosis to pull visits associated with measles. The definition searches for terms and typos related to “Measles” or “Rubeola” as well as ICD-10-CM diagnosis codes and SNOMED concepts related to measles.

Negation terms are included within the definition to exclude visits due to measles immunization and terms of unrelated disease that resembles measles terms (e.g., German measles or Rubella).

Detailed Definition Components

Table 1. Inclusion and exclusion terms included in the CDC Measles CCDD v1 definition.

Terms	Description
<i>Inclusion</i>	
International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)	
B05	Measles
SNOMED Concepts	
14189004	Measles (disorder)
417145006	Rubeola retinopathy (disorder)
28463004	Measles keratitis (disorder)
195900001	Pneumonia due to measles (disorder)
74918002	Measles myocarditis (disorder)
38921001	(inactive) Measles with complication (disorder)
240484000	Modified measles (disorder)
240483006	Atypical measles (disorder)
60013002	Measles keratoconjunctivitis (disorder)
111872008	Post measles encephalitis (disorder)
444435003	Exposure to Measles virus (event)
186562009	Disorder of intestine due to measles (disorder)
416154000	Measles inclusion body encephalitis (disorder)
426558008	Measles virus genotype A (organism)
191727003	Post measles pneumonia (disorder)
111873003	(inactive) Measles without complication (disorder)
230146001	Post measles meningitis (disorder)
186561002	Meningitis caused by measles morbillivirus (disorder)
424306000	Exanthem caused by measles virus (disorder)
13420004	Post measles otitis media (disorder)
406592004	Measles of the central nervous system (disorder)
427290009	Measles virus genotype D8 (organism)
427263000	Measles virus genotype D10 (organism)
426654002	Measles virus genotype B2 (organism)
426424002	Measles virus genotype H2 (organism)
427706006	Measles virus genotype D5 (organism)
426091009	Measles virus genotype G2 (organism)
425684000	Measles virus genotype G3 (organism)
425970007	Measles virus genotype D3 (organism)
732209005	Measles virus genotype B1 (organism)
426188007	Measles virus genotype C1 (organism)
426640005	Measles virus genotype D2 (organism)
427073007	Measles virus genotype B3 (organism)
732207007	Measles virus genotype E (organism)
426535005	Measles virus genotype D9 (organism)
426028006	Measles virus genotype D6 (organism)
427182003	Measles virus genotype C2 (organism)
732210000	Measles virus genotype G1 (organism)
698204007	Measles virus genotype D11 (organism)
425966004	Measles virus genotype H1 (organism)
416435006	Measles virus, viral envelope M protein variant (organism)
444974003	Detection of Measles virus using polymerase chain reaction technique (procedure)

Chief Complaint	
measl	
meez	
mesles	
rubeo	
Measel	
Measul	
Exclusion	
SNOMED Concepts	
47435007	Administration of vaccine product containing only Measles morbillivirus antigen (procedure)
371085006	Measles non-immune (finding)
150961000119105	Measles vaccination given (situation)
61153008	(inactive) Measles, mumps and rubella vaccine (product)
150971000119104	Measles, mumps and rubella vaccination given (situation)
473166002	History of measles, mumps and rubella vaccination (situation)
703347005	Requires measles, mumps and rubella vaccination (finding)
170433008	Administration of second dose of vaccine product containing only Measles morbillivirus and Mumps orthorubulavirus and Rubella virus antigens (procedure)
170431005	Administration of booster dose of vaccine product containing only Measles morbillivirus and Mumps orthorubulavirus and Rubella virus antigens (procedure)
432636005	Administration of vaccine product containing only Human alphaherpesvirus 3 and Measles morbillivirus and Mumps orthorubulavirus and Rubella virus antigens (procedure)
571591000119106	Administration of vaccine product containing only live attenuated Measles morbillivirus and Mumps orthorubulavirus and Rubella virus antigens (procedure)
170432003	Administration of pre-school booster dose of vaccine product containing only Measles morbillivirus and Mumps orthorubulavirus and Rubella virus antigens (procedure)
433733003	Administration of second dose of vaccine product containing only Human alphaherpesvirus 3 and Measles morbillivirus and Mumps orthorubulavirus and Rubella virus antigens (procedure)
572511000119105	Administration of vaccine product containing only live attenuated Measles morbillivirus and Mumps orthorubulavirus and Rubella virus and Human alphaherpesvirus 3 antigens (procedure)
440075005	(inactive) Live measles + rubella vaccine injection dose form (product)
Chief Complaint	
Titer	
Measles mumps rubella	
Mmr	
Vacc	
Shot	
Immun	
Rubel	
Proph	
Room b05	
German	
Homesless	
Rule out measles	

Table 2. ESSENCE syntax, CDC Measles CCDD v1

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(,^meas|^,or,^meez|^,or,^mesles|^,or,^rubeo|^,or, ^Measel|^,or,^Measul|^,or,^[/ ]b05^,or,^[/ ]14189004 ^,or,^[/ ]417145006^,or,^[/ ]28463004^,or,^[/ ]195900001^,or,^[/ ]74918002^,or,^[/ ]38921001^,or,^[/ ]240484000^,or,^[/ ]240483006^,or,^[/ ]60013002^,or,^[/ ]111872008^,or,^[/ ]444435003^,or,^[/ ]186562009^,or,^[/ ]416154000^,or,^[/ ]426558008^,or,^[/ ]191727003^,or,^[/ ]111873003^,or,^[/ ]230146001^,or,^[/ ]186561002^,or,^[/ ]424306000^,or,^[/ ]13420004^,or,^[/ ]406592004^,or,^[/ ]427290009^,or,^[/ ]427263000^,or,^[/ ]426654002^,or,^[/ ]426424002^,or,^[/ ] 427706006^,or,^[/ ]426091009^,or,^[/ ]425684000^,or,^[/ ]425970007^,or,^[/ ]732209005^,or,^[/ ]426188007^,or,^[/ ]426640005^,or,^[/ ]427073007^,or,^[/ ]732207007^,or,^[/ ]426535005^,or,^[/ ]426028006^,or,^[/ ]427182003^,or,^[/ ]732210000^,or,^[/ ]698204007^,or,^[/ ]425966004^,or,^[/ ]416435006^,or,^[/ ]444974003^,),andnot,(^titer|^,or,^measles mumps rubella|^,or,^mmr|^,or,^vacc|^,or,^shot|^,or,^immun|^,or,^rubel|^,or,^proph|^,or,^room b05^,or,^german|^,or,^homesless|^,or,^rule out measles|^,or,^[/ ]47435007^,or,^[/ ]371085006^,or,^[/ ]150961000119105^,or,^[/ ]61153008^,or,^[/ ]150971000119104^,or,^[/ ]473166002^,or,^[/ ]703347005^,or,^[/ ]170433008^,or,^[/ ]170431005^,or,^[/ ]432636005^,or,^[/ ]571591000119106^,or,^[/ ]170432003^,or,^[/ ]433733003^,or,^[/ ]572511000119105^,or,^[/ ]440075005 ^,)
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