

Acute Respiratory Illness: CDC Broad Acute Respiratory DD v1 Definition
Preliminary Factsheet & Technical Brief

Definition Purpose: To assist state, local, tribal, territorial, and federal public health practitioners in identifying visits in the emergency department (ED) and urgent care (UC) settings with diagnostic codes associated with a broad range of acute respiratory illnesses. This includes codes associated with specific respiratory infections (e.g. influenza, RSV, or coronavirus), as well as codes associated with general respiratory illness such as cough or pneumonia.

New or Revised Definition: New

Date Added to ESSENCE: June 17, 2022.

Detailed Definition Components

Table 1. Descriptions of discharge diagnosis codes included in the CDC Broad Acute Respiratory DD v1 definition.

Discharge Diagnosis Code Type	Terms	Description
ICD-10-CM	A22.1	Pulmonary anthrax
	A37.X*	Whooping cough
	A37.00	Whooping cough due to Bordetella Pertussis without Pneumonia
	A37.01	Whooping cough: Bordetella pertussis, pneumonia
	A37.10	Whooping cough due to Bordetella parapertussis without pneumonia
	A37.11	Whooping cough: B. parapertussis, pneumonia
	A37.80	Whooping cough due to other Bordetella species without pneumonia
	A37.81	Whooping cough: other Bordetella, pneumonia
	A37.90	Whooping cough, unspecified species without pneumonia
	A37.91	Whooping cough, unspecified species, pneumonia
	A48.1	Legionnaire's disease
	B25.0	Cytomegaloviral pneumonitis
	B34.2	Coronavirus infection, unspecified
	B34.9	Viral infection, unspecified
	B44.0	Invasive pulmonary aspergillosis
	B44.81	Allergic bronchopulmonary aspergillosis
	B44.9	Aspergillosis, unspecified
	B97.2	Coronavirus as the cause of diseases classified elsewhere
	B97.4	Respiratory syncytial virus as the cause of diseases classified elsewhere
	J00	Acute nasopharyngitis (common cold)
	J01.X*	Acute sinusitis
	J01.00	Acute maxillary sinusitis, unspecified
	J01.01	Acute recurrent maxillary sinusitis
	J01.10	Acute frontal sinusitis, unspecified
	J01.11	Acute recurrent frontal sinusitis
	J01.20	Acute ethmoidal sinusitis, unspecified
	J01.21	Acute recurrent ethmoidal sinusitis
	J01.30	Acute sphenoidal sinusitis, unspecified
	J01.31	Acute recurrent sphenoidal sinusitis
	J01.40	Acute pansinusitis, unspecified
	J01.41	Acute recurrent pansinusitis

	J01.80	Other acute sinusitis
	J01.81	Other acute recurrent sinusitis
	J01.90	Acute sinusitis, unspecified
	J01.91	Acute recurrent sinusitis, unspecified
	J02.X*	Acute pharyngitis
	J02.0	Streptococcal pharyngitis
	J02.8	Acute pharyngitis due to other specified organisms
	J02.9	Acute pharyngitis, unspecified
	J03.X*	Acute tonsillitis
	J03.00	Acute streptococcal tonsillitis, unspecified
	J03.01	Acute recurrent streptococcal tonsillitis
	J03.80	Acute tonsillitis due to other specified organisms
	J03.81	Acute recurrent tonsillitis due to other specified organisms
	J03.90	Acute tonsillitis, unspecified
	J03.91	Acute recurrent tonsillitis, unspecified
	J04.X*	Acute laryngitis and tracheitis
	J04.0	Acute laryngitis
	J04.10	Acute tracheitis without obstruction
	J04.11	Acute tracheitis with obstruction
	J04.2	Acute laryngotracheitis
	J04.30	Supraglottitis, unspecified, without obstruction
	J04.31	Supraglottitis, unspecified, with obstruction
	J05.X*	Acute obstructive laryngitis [croup] and epiglottitis
	J05.0	Acute obstructive laryngitis [croup]
	J05.10	Acute epiglottitis without obstruction
	J05.11	Acute epiglottitis with obstruction
	J06.X*	Acute upper respiratory infections of multiple and unspecified sites
	J06.0	Acute laryngopharyngitis
	J06.9	Acute upper respiratory infection, unspecified
	J09.X*	Influenza due to identified novel influenza A virus
	J10.X*	Influenza due to other identified influenza virus
	J11.X*	Influenza due to unidentified influenza virus
	J12.X*	Viral pneumonia, not elsewhere classified
	J12.0	Adenoviral pneumonia
	J12.1	Respiratory syncytial virus pneumonia
	J12.2	Parainfluenza virus pneumonia
	J12.3	Human metapneumovirus pneumonia
	J12.81	Pneumonia due to SARS-associated coronavirus
	J12.82	Pneumonia due to COVID-19 / SARS CoV-2
	J12.89	Other viral pneumonia
	J12.9	Viral pneumonia, unspecified
	J13	Pneumonia due to Streptococcus pneumoniae
	J14	Pneumonia due to Hemophilus influenzae
	J15.X*	Bacterial pneumonia, not elsewhere classified
	J15.0	Pneumonia due to Klebsiella pneumoniae
	J15.1	Pneumonia due to Pseudomonas
	J15.20	Pneumonia due to staphylococcus, unspecified
	J15.211	Pneumonia due to Methicillin susceptible Staphylococcus aureus

	J15.212	Pneumonia due to Methicillin resistant Staphylococcus aureus
	J15.29	Pneumonia due to other staphylococcus
	J15.3	Pneumonia due to streptococcus, group B
	J15.4	Pneumonia due to other streptococci
	J15.5	Pneumonia due to Escherichia coli
	J15.6	Pneumonia due to other Gram-negative bacteria
	J15.7	Pneumonia due to Mycoplasma pneumoniae
	J15.8	Pneumonia due to other specified bacteria
	J15.9	Unspecified bacterial pneumonia
	J16.X*	Pneumonia due to other infectious organisms, not elsewhere classified
	J16.0	Chlamydial pneumonia
	J16.8	Pneumonia due to other specified infectious organisms
	J17	Pneumonia in diseases classified elsewhere
	J18.X*	Pneumonia, unspecified organism
	J18.0	Bronchopneumonia, unspecified organism
	J18.1	Lobar pneumonia, unspecified organism
	J18.2	Hypostatic pneumonia, unspecified organism
	J18.8	Other pneumonia, unspecified organism
	J18.9	Pneumonia, unspecified organism
	J20.X*	Acute bronchitis
	J20.0	Acute bronchitis due to Mycoplasma pneumoniae
	J20.1	Acute bronchitis due to Hemophilus influenzae
	J20.2	Acute bronchitis due to streptococcus
	J20.3	Acute bronchitis due to coxsackievirus
	J20.4	Acute bronchitis due to parainfluenza virus
	J20.5	Acute bronchitis due to respiratory syncytial virus
	J20.6	Acute bronchitis due to rhinovirus
	J20.7	Acute bronchitis due to echovirus
	J20.8	Acute bronchitis due to other specified organisms
	J20.9	Acute bronchitis, unspecified
	J21.X*	Other acute lower respiratory infections
	J21.0	Acute bronchiolitis due to respiratory syncytial virus
	J21.1	Acute bronchiolitis due to human metapneumovirus
	J21.8	Acute bronchiolitis due to other specified organisms
	J21.9	Acute bronchiolitis, unspecified
	J22	Unspecified acute lower respiratory tract infection
	J39.8	Other specified diseases of upper respiratory tract
	J40	Bronchitis, not specified as acute or chronic
	J47.9	Bronchiectasis with acute exacerbation
	J80	Acute Respiratory Distress Syndrome
	J85.1	Abscess of lung with pneumonia
	J95.821	Acute postprocedural respiratory failure
	J96.0	Acute respiratory failure
	J96.00	Acute respiratory failure, unspecified whether with hypoxia or hypercapnia
	J96.01	Acute respiratory failure with hypoxia
	J96.02	Acute respiratory failure with hypercapnia
	J96.2	Acute and chronic respiratory failure

	J96.20	Acute and chronic respiratory failure, unspecified whether with hypoxia or hypercapnia
	J96.21	Acute and chronic respiratory failure with hypoxia
	J96.22	Acute and chronic respiratory failure with hypercapnia
	J96.91	Respiratory failure, unspecified with hypoxia
	J98.8	Other specified respiratory disorders
	R05	Cough
	R06.03	Acute respiratory distress
	R09.02	Hypoxemia
	R09.2	Respiratory arrest
	R43.0	Anosmia
	R43.1	Parosmia
	R43.2	Parageusia
	U07.1	COVID-19, virus identified
	U07.2	COVID-19, virus not identified
ICD-10-CM – must appear in combination with discharge diagnosis code for fever (R50.9)	R06.00	Dyspnea, unspecified plus fever
	R06.02	Shortness of breath
ICD-9-CM	022.1	Pulmonary anthrax
	033.X*	Whooping cough
	034.0	Streptococcal sore throat
	041.5	Hemophilus influenzae [H. influenzae] infection in conditions classified elsewhere and of unspecified site
	041.81	Other specified bacterial infections in conditions classified elsewhere and of unspecified site, mycoplasma
	073.0	Ornithosis with pneumonia
	079.1	Echo virus infection in conditions classified elsewhere and of unspecified site
	079.2	Coxsackie virus infection in conditions classified elsewhere and of unspecified site
	079.3	Rhinovirus infection in conditions classified elsewhere and of unspecified site
	079.6	Respiratory syncytial virus (RSV)
	079.82	SARS-associated coronavirus infection
	079.89	Other specified viral infection
	079.99	Other specified viral infection
	117.3	Aspergillosis
	460	Acute nasopharyngitis [common cold]
	461.X*	Acute sinusitis
	462	Acute pharyngitis
	463	Acute tonsillitis
	464.X*	Acute laryngitis and tracheitis
	465.X*	Acute upper respiratory infections of multiple or unspecified sites
	466.X *	Acute bronchitis and bronchiolitis
	478.9	Other and unspecified diseases of upper respiratory tract
	480.X*	Viral pneumonia
	481	Pneumococcal pneumonia [Streptococcus pneumoniae pneumonia]

	482.X*	Pneumonia due to Klebsiella pneumoniae
	483.X*	Pneumonia due to other specified organism
	484.X*	Pneumonia in cytomegalic inclusion disease
	485	Bronchopneumonia, organism unspecified
	486	Pneumonia, organism unspecified
	487.X*	Influenza
	488.X*	Influenza due to identified avian influenza virus
	490	Bronchitis, not specified as acute or chronic
	494.1	Bronchiectasis with acute exacerbation
	517.1	Rheumatic pneumonia
	518.51	Acute respiratory failure following trauma and surgery
	518.53	Acute and chronic respiratory failure following trauma and surgery
	518.6	Allergic bronchopulmonary aspergillosis
	518.81	Acute respiratory failure
	518.82	Other pulmonary insufficiency, not elsewhere classified
	518.84	Acute and chronic respiratory failure
	519.8	Other diseases of respiratory system, not elsewhere classified
	781.1	Disturbance of sensation of smell and taste
	786.2	Cough
	799.02	Hypoxemia
	799.1	Respiratory arrest
ICD-9-CM – must appear in combination with code for fever (780.60)	786.05	Shortness of breath
	786.09	Other respiratory abnormalities

*All codes with the first three-digit prefixes (for example, A37 includes all A37.xx)

Table 2. ESSENCE syntax

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^[/ ]A22.1^,or,^[/ ]A221^,or,^[/ ]A37^,or,^[/ ]A48.1^,or,^[/ ]A481^,or,^[/ ]B25.0^,or,^[/ ]B250^,or,^[/ ]
B34.[29]^,or,^[/ ]B34[29]^,or,^[/ ]B44.[09]^,or,^[/ ]B44[09]^,or,^[/ ]B44.81^,or,^[/ ]B4481^,or,^[/ ]
B97.[24]^,or,^[/ ]B97[24]^,or,^[/ ]J0[0-69]^,or,^[/ ]J1[0-8]^,or,^[/ ]J2[012]^,or,^[/ ]J39.8^,or,^[/ ]J398^,or,^[/ ]
J40^,or,^[/ ]J47.9^,or,^[/ ]J479^,or,^[/ ]J80^,or,^[/ ]J85.1^,or,^[/ ]J851^,or,^[/ ]J95.821^,or,^[/ ]J95821^,or,^[/ ]
J96.[02]^,or,^[/ ]J96[02]^,or,^[/ ]J96.91^,or,^[/ ]J9691^,or,^[/ ]J98.8^,or,^[/ ]J988^,or,^[/ ]R05^,or,(^[/ ]
R06.0[02]^,or,^[/ ]R060[02]^),AND,(^[/ ]R50.9^,or,^[/ ]R509^),or,^[/ ]R06.03^,or,^[/ ]R0603^,or,^[/ ]
R09.02^,or,^[/ ]R0902^,or,^[/ ]R09.2^,or,^[/ ]R092^,or,^[/ ]R43.[012]^,or,^[/ ]R43[012]^,or,^[/ ]U07.[12]^,or,^[/ ]
U07[12]^,or,^[/ ]022.1^,or,^[/ ]0221[/ ]^,or,^[/ ]034.0^,or,^[/ ]0340[/ ]^,or,^[/ ]041.5^,or,^[/ ]0415[/ ]^,or,^[/ ]
041.81^,or,^[/ ]04181[/ ]^,or,^[/ ]079.[1236]^,or,^[/ ]079[1236][/ ]^,or,^[/ ]079.8[29]^,or,^[/ ]0798[29][/ ]^,or,^[/ ]
079.99^,or,^[/ ]07999[/ ]^,or,^[/ ]117.3^,or,^[/ ]1173[/ ]^,or,^[/ ]46[0-6][/ ]^,or,^[/ ]461.[0-9]^,or,^[/ ]461[0-9][/ ]
^,or,^[/ ]46[1456].[0-9]^,or,^[/ ]46[1456][0-9][/ ]^,or,^[/ ]46[1456][0-9][019][/ ]^,or,^[/ ]478.9^,or,^[/ ]4789[/ ]
^,or,^[/ ]48[0-8][/ ]^,or,^[/ ]48[023478].[0-9]^,or,^[/ ]48[023478][0-9][/ ]^,or,^[/ ]48[28][0-9][0-9][/ ]^,or,^[/ ]490[/ ]
^,or,^[/ ]494.1^,or,^[/ ]4941[/ ]^,or,^[/ ]517.1^,or,^[/ ]5171[/ ]^,or,^[/ ]518.5[13]^,or,^[/ ]5185[13][/ ]^,or,^[/ ]
518.6^,or,^[/ ]5186[/ ]^,or,^[/ ]518.8[124]^,or,^[/ ]5188[124][/ ]^,or,^[/ ]519.8^,or,^[/ ]5198[/ ]^,or,^[/ ]
073.0^,or,^[/ ]0730[/ ]^,or,^[/ ]781.1^,or,^[/ ]7811[/ ]^,or,^[/ ]786.2^,or,^[/ ]7862[/ ]^,or,^[/ ]799.02^,or,^[/ ]
79902[/ ]^,or,^[/ ]799.1^,or,^[/ ]7991[/ ]^,or,^[/ ]033[/ ]^,or,^[/ ]033.[0-9]^,or,^[/ ]033[0-9][/ ]^,or,(^[/ ]
780.60^,or,^[/ ]78060[/ ]^),AND,(^[/ ]786.0[59]^,or,^[/ ]7860[59][/ ]^,
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