# Pertussis Death Worksheet Instructions

1. **Decedent State of Residence**: State of decedent’s residence at time of cough onset.
2. **State Surveillance ID**: State-assigned, unique identifier assigned to pertussis case-patients. If the decedent did not meet the CSTE pertussis case definition for reporting, this field should be left blank.
3. **County of Residence**: County of decedent’s residence at time of cough onset.
4. **State Where Death Occurred**: State where the decedent expired, which may differ from the state of residence if the decedent was treated or hospitalized away from home.
5. **Date of Birth**: Birth date of the decedent in MM/DD/YYYY format.
6. **Country of Birth**: Country where the decedent was born.
7. **Gestational age at birth**: For decedents < 1 year of age at time of cough onset, record the number of completed weeks of gestation at birth. This data element should be left blank for case-patients ≥ 1 year of age.
8. **Cough Onset Date**: Date on which the decedent experienced first cough during the course of illness in MM/DD/YYYY format.
9. **Date of Death**: Date on which the decedent expired in MM/DD/YYYY format.
10. **Sex**: Indicate whether decedent is Male or Female.
11. **Race**: Decedent’s race reported by next of kin or recorded from medical records/death certificate; more than one option may be recorded.
12. **Ethnicity**: Decedent’s ethnicity reported by next of kin or recorded from medical records/death certificate.
13. **Clinical Symptoms – General Instructions**: Select all of the clinical symptoms that the decedent experienced during the course of illness preceding their death.

* **Cough**: Cough of any duration.
* **Apnea**: Prolonged failure to take a breath, possibly after a coughing spasm, or without prior coughing in an infant. Apnea may occur with or without cyanosis. *Next of kin report is sufficient to confirm the presence of apnea*.
* **Paroxysms**: Sudden, uncontrollable bursts or spells of coughing where one cough follows the next without a break for breath.
* **Post-tussive Vomiting**: Vomiting immediately following a paroxysm.
* **Whoop: A** high-pitched noise heard on inhalation after paroxysms of cough.
* **Cyanosis:** A bluish or purplish tinge to the skin or mucous membranes during the course of illness. *Next of kin report is sufficient to confirm the presence of cyanosis.*
* **Fever:** Only select if decedent experienced a temperature of ≥ 100.4 degrees Fahrenheit that is documented in their medical chart. This data element should be left blank for decedents who did not experience fever.
* **Rhinorrhea:** Watery discharge from the nose.
* **Other**: List any other symptoms experienced by the decedent that you feel are pertinent to their pertussis infection.

1. **Cough Duration**: The total number of days the decedent coughed from the date of cough onset to the date of death. If decedent stopped coughing prior to the date of death but the last date of cough is unavailable, duration of cough should be calculated using the latest date at which cough was recorded by a clinician. For example, if the decedent began coughing on January 1, was recorded as coughing on January 8th and died on January 27th (but had ceased coughing at an unknown date prior to death) the cough duration should be recorded as 7 days (i.e., January 8 – January 1.)
2. **Pertussis Laboratory Results – General Instructions**: Select all of the pertussis-positive types of laboratory results associated with the decedent during the course of illness preceding their death.

* **Culture**: Isolation of *Bordetella pertussis* via bacterial culture.
* **PCR**: Detection of *Bordetella pertussis* or unspecified *Bordetella* species DNA via Polymerase Chain Reaction (PCR).
* **Serology**: Select if any positive pertussis serology results are available for the decedent; if multiple serologic test results are generated and results are discordant, any positive result should be noted here.
* **Respiratory** **Panel**: If a multi-pathogen respiratory panel assay was used to diagnose pertussis, provide the panel name/manufacturer (e.g., BioFire/FilmArray).
* **Other**: Provide the type/name of any other positive pertussis test result associated with the decedent’s course of illness preceding their death.

1. **Complications Experienced – General Instructions**: Select all of the complications the decedent experienced during the course of illness preceding their death.

* **Pneumonia**: Pneumonia should be reported only if diagnosed by a healthcare provider and should not be based on report by next of kin.
* **Encephalopathy**: Acute illness of the brain manifesting as decreased level of consciousness (excluding altered consciousness following an unrelated seizure) and reduced level of nervous system functioning. Encephalopathy almost always results in hospitalization and requires extensive evaluation. Acute encephalopathy should be reported only if diagnosed by a healthcare provider and should not be based on report by next of kin.
* **Seizures**: Select if the decedent ever experienced any seizures *not* associated with another diagnosis. Next of kin report is sufficient to confirm the presence of seizures.
* **Lymphocytosis**: Select if the decedent was diagnosed with an elevated white blood cell count. Lymphocytosis should only be reported if diagnosed by a healthcare provider and documented in the medical chart or death certificate.
* **Other**: List any other documented complications that the decedent experienced during the course of illness preceding their death.

1. **Was Decedent Hospitalized**: Indicate whether the decedent was hospitalized at any time during the course of illness preceding their death. Hospitalization typically refers to admission into an in-patient care facility; however, a decedent also would be considered hospitalized if admitted for 24 or more hours in an observation unit or ER. A decedent would not be considered hospitalized if admitted for a <24-hour observation period only. Be sure to include first admission date associated with decedent’s pertussis illness, as well as either the final date of discharge or date of death, where appropriate. If decedent was transferred between hospitals during their period of hospitalization, record only the first date of admission and last date of discharge.
2. **Treatments/Interventions – General Instructions**: Select all of the treatments or interventions the decedent received as a result of the illness that preceded their death; include the date the treatment or intervention was started.

* **Antibiotics**: Record any antibiotic treatment provided to the decedent during the course of illness preceding their death. *Refer to Appendix 1 for a complete list of antibiotic generic and brand names.*
* **Intubation**: Record if decedent required placement of an endotracheal tube and mechanical ventilation during the course of illness preceding their death.

Notes:

* + Mechanical ventilation is referred to as conventional ventilation (CV) or conventional mechanical ventilation (CMV). Mechanical ventilation settings include A/C (assist control), IMV (intermittent mandatory ventilation), SIMV (synchronized IMV), PSV (pressure support ventilation).
  + Include decedents on high frequency ventilation**:** Includes high frequency positive pressure ventilation (HPPV), high frequency percussive ventilation (HFPV), includes volumetric diffusive ventilation or (VDR), high frequency jet ventilation (HFJV, or “jet”), high frequency oscillatory ventilation (HFOV, or “oscillator”), and high frequency flow interrupter (HFFI).
  + Do not include decedents that only required supplemental oxygen (O2) without intubation (includes patients on nasal cannula [NC] or non-invasive positive pressure ventilation, such as CPAP [continuous positive airway pressure] and bilevel positive airway pressure [BiPAP or BPAP]).
* **ECMO:** Select if the decedent underwent Extracorporeal Membrane Oxygenation (ECMO) during the course of illness preceding their death.

Note: ECMO is a procedure that uses a machine to take over the work of the lungs (Veno-veno; VV) or the heart and lungs (Veno-arterial; VA). It is sometimes used in pertussis patients with severe pulmonary hypertension. Evidence shows reductions in WBC count in ECMO-treated patients who present with very high WBC.

* **Other**: List any other treatments or interventions provided to the decedent during the course of illness preceding their death.

1. **Epi-linked to a Lab-Confirmed Case**: Indicate whether the decedent was epidemiologically-linked to another laboratory-confirmed case of pertussis, which was identified by either culture or PCR.
2. **Family History of Cough**: Indicate whether anyone in the decedent’s family or immediate household experienced acute cough illness within the 21 days prior to the decedent’s own cough onset.
3. **Underlying Health Issues – General Instructions**: Select any of the underlying health issues listed on the worksheet that the decedent experienced prior to or during the course of illness preceding their death. *Refer to Appendix 2 for a complete description of each option.*
4. **Co-Infections and Other Diagnoses – General Instructions**: Select any of the diseases listed on the worksheet diagnosed via laboratory testing that were identified during the decedent’s course of illness preceding their death.
5. **Decedent Pertussis Vaccination History – General Instructions**: Provide all documented doses of pertussis-containing vaccines administered to the decedent at least two weeks prior to their cough onset. Include each of the pieces of information listed below. vaccine type, date of vaccine administration, and vaccine manufacturer and/or lot number, where available. *Refer to Appendix 3 for a complete list of vaccine types, names and manufacturers.*

* **Vaccine (Type or Name)**: For each documented dose of vaccine, record the type and/or brand name.
* **Date Administered**: For each *documented* dose of vaccine, please list the date of administration in MM/DD/YYYY format. If only month and year are available, fill in ‘15’ for the day portion of the date.
* **Manufacturer and/or Lot Number**: Record the manufacturer and or lot number associated with the dose of vaccine.

1. **Maternal Tdap History – General Instructions:** For decedents < 12 months of age, provide all documented doses of Tdap administered to the decedent’s biological mother, either prior to, during, or following her pregnancy with the decedent. For each documented dose of Tdap administered to the decedent’s biological mother, include each of the pieces of information listed, below. *Refer to Appendix 3 for a complete list of vaccine types, names and manufacturers.*

* **Date Administered**: For each *documented* dose of Tdap, please list the date of administration in MM/DD/YYYY format. If only month and year are available, fill in ‘15’ for the day portion of the date.
* **Pregnancy Status at Administration**: Indicate whether decedent’s biological mother was Pregnant, Post-Partum (within the 30 days following birth), or Neither at the time of Tdap administration.
* **Week of Pregnancy**: If decedent’s biological mother was pregnant with the decedent at the time of Tdap administration, record the number of weeks of pregnancy she had *completed* on the date of administration.
* **Delivery Date/Expected Delivery Date**: If decedent’s biological mother was pregnant with the decedent at the time of Tdap administration, record the mother’s delivery date or expected delivery date in MM/DD/YYYY FORMAT.
* **Manufacturer and/or Lot Number**: Record the manufacturer and or lot number associated with the dose of Tdap.

1. **Post Mortem Examination and Death Certificate Information**

* **Was Post-Mortem Exam Done**: Indicate whether a post-mortem examination was completed for the decedent.
* **Is Death Certificate Available**: Indicate whether the decedent’s death certificate was available when completing the pertussis death worksheet.
* **Causes of Death/ICD-10 Codes**: Using the decedent’s death certificate, list all of the causes of death, including complete ICD-10 codes; be sure to include all decimal points where applicable.
* **Contributing Conditions/ICD-10 Codes**: Using the decedent’s death certificate, list all of the contributing conditions, including complete ICD-10 codes; be sure to include all decimal points where applicable.

| APPENDIX 1: Antibiotics- Alphabetized by Generic Name | |
| --- | --- |
| **Generic Name** | **Brand Name** |
| AMIKACIN | AMIKACIN |
| AMOX/CLAVULANATE | AUGMENTIN |
| AMOXICILLIN | AMOXICILLIN |
| AMOXICILLIN | AMOXIL |
| AMOXICILLIN | TRIMOX |
| AMPICILLIN | AMPICILLIN SODIUM |
| AMPICILLIN | PRINCIPEN |
| AMPICILLIN/SULBACTAM | UNASYN |
| AZITHROMYCIN | AZITHROMYCIN |
| AZITHROMYCIN | ZITHROMAX |
| AZITHROMYCIN | ZITHROMAX Z-PAK |
| AZTREONAM | AZACTAM |
| CARBENICILLIN | GEOCILLIN |
| CEFACLOR | CECLOR |
| CEFACLOR | CEFACLOR |
| CEFADROXIL | CEFADROXIL |
| CEFADROXIL | DURICEF |
| CEFADROXIL | KEFLEX |
| CEFADROXIL | KEFTAB |
| CEFAZOLIN | CEFAZOLIN SODIUM |
| CEFDINIR | OMNICEF |
| CEFDITOREN | SPECTRACEF |
| CEFEPIME | MAXIPIME |
| CEFIXIME | SUPRAX |
| CEFOTAXIME | CEFOTAXIME SODIUM |
| CEFOTAXIME | CLAFORAN |
| CEFOTETAN | CEFOTETAN DISODIUM |
| CEFOXITIN | CEFOXITIN SODIUM |
| CEFPOXODIME | VANTIN |
| CEFPROZIL | CEFPROZIL |
| CEFPROZIL | CEFZIL |
| CEFTAZIDIME | CEFTAZIDIME PENTAHYDRATE |
| CEFTIBUTEN | CEDAX |
| CEFTIZOXIME | CEFIZOX |
| CEFTRIAXONE | CEFTRIAXONE SODIUM |
| CEFTRIAXONE | ROCEPHIN |
| CEFUROXIME | CEFTIN |
| CEFUROXIME | CEFUROXIME |
| CEPHALEXIN | CEPHALEXIN |
| CHLORAMPHENICOL | CHLOROMYCETIN |
| CIPROFLOXACIN | CIPRO |
| CIPROFLOXACIN | CIPROFLOXACIN |
| CLARITHROMYCIN | BIAXIN |
| CLARITHROMYCIN | CLARITHROMYCIN |
| CLINDAMYCIN | CLEOCIN |
| CLINDAMYCIN | CLINDAMYCIN |
| COLESTIMETHATE | COLY-MYCIN |
| COLISTIN | COLY-MYCIN |
| DAPTOMYCIN | CUBICIN |
| DEMECLOCYCLINE | DEMECLOCYCLINE HCL |
| DICLOXACILLIN | DICLOXACILLIN |
| DIRITHROMYCIN | DYNABAC |
| DORIPENEM | DORIBAX |
| DOXYCYCLINE | ADOXA |
| DOXYCYCLINE | DORYX EC |
| DOXYCYCLINE | DOXYCYCLINE |
| DOXYCYCLINE | MONODOX |
| DOXYCYCLINE | VIBRAMYCIN |
| ERTAPENEM | INVANZ |
| ERYTHROMYCIN | ERY E-SUCC/SULFISOXAZOLE |
| ERYTHROMYCIN | ERYPED |
| ERYTHROMYCIN | ERY-TAB EC |
| ERYTHROMYCIN | ERYTHROCIN |
| ERYTHROMYCIN | ERYTHROMYCIN |
| ERYTHROMYCIN | PCE |
| GATIFLOXACIN | TEQUIN |
| GEMIFLOXACIN | FACTIVE |
| GENTAMICIN | GENTAMICIN SULFATE |
| IMIPENEM | IMIPENEM/CILASTATIN SODIUM |
| IMIPENEM | PRIMAXIN |
| IMIPENEM/CILASTIN | PRIMAXIN I.V. |
| KANAMYCIN | KANAMYCIN SULFATE |
| LEVOFLOXACIN | LEVAQUIN |
| LEVOFLOXACIN | LEVOFLOXACIN |
| LINCOMYCIN | LINOCIN |
| LINEZOLID | LINEZOLID |
| LINEZOLID | ZYVOX |
| LORACARBEF | LORABID |
| MEROPENEM | MERREM |
| METHENAMINE | HIPREX |
| METHENAMINE | UREX |
| METRONIDAZOLE | FLAGYL |
| METRONIDAZOLE | METRONIDAZOLE |
| MINOCYCLINE | DYNACIN |
| MINOCYCLINE | MINOCIN PELLETIZED |
| MINOCYCLINE | MINOCYCLINE |
| MOXIFLOXACIN | AVELOX |
| MOXIFLOXACIN | MOXIFLOXACIN HCL |
| NAFCILLIN | NAFCILLIN SODIUM |
| NITROFURANTOIN | FURADANTIN |
| NITROFURANTOIN | MACROBID |
| NITROFURANTOIN | MACRODANTIN |
| NITROFURANTOIN | NITROFURANTOIN |
| NORFLOXACIN | NOROXIN |
| OXACILLIN | FLOXIN |
| OXACILLIN | OXACILLIN |
| PENICILLIN | PEN G BENZ/PEN G PROCAINE |
| PENICILLIN | PENICILLIN |
| PENICILLIN | PENICILLIN VK |
| PENICILLIN | VEETIDS |
| PIPERACILLIN | PIPERACIL |
| PIPERACILLIN | PIPERACILLIN SODIUM |
| PIPERACILLin/TAZOBACTAM | PIPERACILLIN/TAZOBACTAM SODIUM |
| PIPERACILLin/TAZOBACTAM | ZOSYN |
| POLYMYXIN B | POLYMYXIN B SULFATE |
| QUINUPRISTIN/DALFOPRISTIN | QUINUPRISTIN/DALFOPRISTIN |
| QUINUPRISTIN/DALFOPRISTIN | SYNERCID |
| RIFAMPICIN | RIFADIN |
| RIFAMPIN | RIFADIN |
| SMX/TMP | BACTRIM DS |
| SMX/TMP | SEPTRA DS |
| SMX/TMP | SULFAMETHOXAZOLE W/TMP |
| SMX/TMP | SULFAMETHOXAZOLE/TRIMETHOPRIM |
| SMX/TMP | SULFATRIM |
| STREPTOMYCIN | STREPTOMYCIN |
| SULFACETAMIDE | SULFACETAMIDE SODIUM |
| SULFADIAZINE | SULFADIAZINE |
| SULFAMETHOXAZOLE/TRIMETHOPRIM | CO-TRIMOXAZOLE |
| SULFASALAZINE | AZULFIDINE |
| SULFASALAZINE | SULFASALAZINE |
| SULFISOXAZOLE | SULFISOXAZOLE |
| TELITHROMYCIN | KETEK |
| TETRACYCLINE | ACHROMYCIN V |
| TETRACYCLINE | SUMYCIN |
| TETRACYCLINE | TETRACYCLINE |
| TICARCILLIN | TICARCILLIN |
| TICARCILLIN/CLAVULANATE | TICARCILLIN/K CLAVULANATE |
| TICARCILLIN/CLAVULANATE | TIMENTIN |
| TIGECYCLINE | TYGACIL |
| TOBRAMYCIN | TOBI |
| TOBRAMYCIN | TOBRAMYCIN SULFATE |
| TRIMETHOPRIM | TRIMETHOPRIM |
| VANCOMYCIN | VANCOCIN |

| APPENDIX 1: Antibiotics- Alphabetized by Brand Name | |
| --- | --- |
| **Generic Name** | **Brand Name** |
| TETRACYCLINE | ACHROMYCIN V |
| DOXYCYCLINE | ADOXA |
| AMIKACIN | AMIKACIN |
| AMOXICILLIN | AMOXICILLIN |
| AMOXICILLIN | AMOXIL |
| AMPICILLIN | AMPICILLIN SODIUM |
| AMOX/CLAVULANATE | AUGMENTIN |
| MOXIFLOXACIN | AVELOX |
| AZTREONAM | AZACTAM |
| AZITHROMYCIN | AZITHROMYCIN |
| SULFASALAZINE | AZULFIDINE |
| SMX/TMP | BACTRIM DS |
| CLARITHROMYCIN | BIAXIN |
| CEFACLOR | CECLOR |
| CEFTIBUTEN | CEDAX |
| CEFACLOR | CEFACLOR |
| CEFADROXIL | CEFADROXIL |
| CEFAZOLIN | CEFAZOLIN SODIUM |
| CEFTIZOXIME | CEFIZOX |
| CEFOTAXIME | CEFOTAXIME SODIUM |
| CEFOTETAN | CEFOTETAN DISODIUM |
| CEFOXITIN | CEFOXITIN SODIUM |
| CEFPROZIL | CEFPROZIL |
| CEFTAZIDIME | CEFTAZIDIME PENTAHYDRATE |
| CEFUROXIME | CEFTIN |
| CEFTRIAXONE | CEFTRIAXONE SODIUM |
| CEFUROXIME | CEFUROXIME |
| CEFPROZIL | CEFZIL |
| CEPHALEXIN | CEPHALEXIN |
| CHLORAMPHENICOL | CHLOROMYCETIN |
| CIPROFLOXACIN | CIPRO |
| CIPROFLOXACIN | CIPROFLOXACIN |
| CEFOTAXIME | CLAFORAN |
| CLARITHROMYCIN | CLARITHROMYCIN |
| CLINDAMYCIN | CLEOCIN |
| CLINDAMYCIN | CLINDAMYCIN |
| COLESTIMETHATE | COLY-MYCIN |
| COLISTIN | COLY-MYCIN |
| SULFAMETHOXAZOLE/TRIMETHOPRIM | CO-TRIMOXAZOLE |
| DAPTOMYCIN | CUBICIN |
| DEMECLOCYCLINE | DEMECLOCYCLINE HCL |
| DICLOXACILLIN | DICLOXACILLIN |
| DORIPENEM | DORIBAX |
| DOXYCYCLINE | DORYX EC |
| DOXYCYCLINE | DOXYCYCLINE |
| CEFADROXIL | DURICEF |
| DIRITHROMYCIN | DYNABAC |
| MINOCYCLINE | DYNACIN |
| ERYTHROMYCIN | ERY E-SUCC/SULFISOXAZOLE |
| ERYTHROMYCIN | ERYPED |
| ERYTHROMYCIN | ERY-TAB EC |
| ERYTHROMYCIN | ERYTHROCIN |
| ERYTHROMYCIN | ERYTHROMYCIN |
| GEMIFLOXACIN | FACTIVE |
| METRONIDAZOLE | FLAGYL |
| OXACILLIN | FLOXIN |
| NITROFURANTOIN | FURADANTIN |
| GENTAMICIN | GENTAMICIN SULFATE |
| CARBENICILLIN | GEOCILLIN |
| METHENAMINE | HIPREX |
| IMIPENEM | IMIPENEM/CILASTATIN SODIUM |
| ERTAPENEM | INVANZ |
| KANAMYCIN | KANAMYCIN SULFATE |
| CEFADROXIL | KEFLEX |
| CEFADROXIL | KEFTAB |
| TELITHROMYCIN | KETEK |
| LEVOFLOXACIN | LEVAQUIN |
| LEVOFLOXACIN | LEVOFLOXACIN |
| LINEZOLID | LINEZOLID |
| LINCOMYCIN | LINOCIN |
| LORACARBEF | LORABID |
| NITROFURANTOIN | MACROBID |
| NITROFURANTOIN | MACRODANTIN |
| CEFEPIME | MAXIPIME |
| MEROPENEM | MERREM |
| METRONIDAZOLE | METRONIDAZOLE |
| MINOCYCLINE | MINOCIN PELLETIZED |
| MINOCYCLINE | MINOCYCLINE |
| DOXYCYCLINE | MONODOX |
| MOXIFLOXACIN | MOXIFLOXACIN HCL |
| NAFCILLIN | NAFCILLIN SODIUM |
| NITROFURANTOIN | NITROFURANTOIN |
| NORFLOXACIN | NOROXIN |
| CEFDINIR | OMNICEF |
| OXACILLIN | OXACILLIN |
| ERYTHROMYCIN | PCE |
| PENICILLIN | PEN G BENZ/PEN G PROCAINE |
| PENICILLIN | PENICILLIN |
| PENICILLIN | PENICILLIN VK |
| PIPERACILLIN | PIPERACIL |
| PIPERACILLIN | PIPERACILLIN SODIUM |
| PIPERACILLin/TAZOBACTAM | PIPERACILLIN/TAZOBACTAM SODIUM |
| POLYMYXIN B | POLYMYXIN B SULFATE |
| IMIPENEM | PRIMAXIN |
| IMIPENEM/CILASTIN | PRIMAXIN I.V. |
| AMPICILLIN | PRINCIPEN |
| QUINUPRISTIN/DALFOPRISTIN | QUINUPRISTIN/DALFOPRISTIN |
| RIFAMPICIN | RIFADIN |
| RIFAMPIN | RIFADIN |
| CEFTRIAXONE | ROCEPHIN |
| SMX/TMP | SEPTRA DS |
| CEFDITOREN | SPECTRACEF |
| STREPTOMYCIN | STREPTOMYCIN |
| SULFACETAMIDE | SULFACETAMIDE SODIUM |
| SULFADIAZINE | SULFADIAZINE |
| SMX/TMP | SULFAMETHOXAZOLE W/TMP |
| SMX/TMP | SULFAMETHOXAZOLE/TRIMETHOPRIM |
| SULFASALAZINE | SULFASALAZINE |
| SMX/TMP | SULFATRIM |
| SULFISOXAZOLE | SULFISOXAZOLE |
| TETRACYCLINE | SUMYCIN |
| CEFIXIME | SUPRAX |
| QUINUPRISTIN/DALFOPRISTIN | SYNERCID |
| GATIFLOXACIN | TEQUIN |
| TETRACYCLINE | TETRACYCLINE |
| TICARCILLIN | TICARCILLIN |
| TICARCILLIN/CLAVULANATE | TICARCILLIN/K CLAVULANATE |
| TICARCILLIN/CLAVULANATE | TIMENTIN |
| TOBRAMYCIN | TOBI |
| TOBRAMYCIN | TOBRAMYCIN SULFATE |
| TRIMETHOPRIM | TRIMETHOPRIM |
| AMOXICILLIN | TRIMOX |
| TIGECYCLINE | TYGACIL |
| AMPICILLIN/SULBACTAM | UNASYN |
| METHENAMINE | UREX |
| VANCOMYCIN | VANCOCIN |
| CEFPOXODIME | VANTIN |
| PENICILLIN | VEETIDS |
| DOXYCYCLINE | VIBRAMYCIN |
| AZITHROMYCIN | ZITHROMAX |
| AZITHROMYCIN | ZITHROMAX Z-PAK |
| PIPERACILLin/TAZOBACTAM | ZOSYN |
| LINEZOLID | ZYVOX |

| APPENDIX 2: Underlying Health Issues | |
| --- | --- |
| AIDS or CD4 count <200 | This includes patients 1) diagnosed with AIDS and 2) those who are HIV+ and whose CD4 count was *ever* <200, even if AIDS is not a diagnosis noted in the chart.  The CD4 count from the *current* illness/admission being investigated may be used to determine if the person has AIDS and is most often listed in the admission history and physical or discharge summary; prior charts do not need to be reviewed.  The lowest CD4 count is often listed in the admission history and physical or discharge summary. If “AIDS” is checked, “HIV Infection” should also be checked, but if HIV is present, AIDS should only be checked if it is the diagnosed in the chart of if the CD4 count is <200. |
| Alcohol abuse | Current: abuse of alcohol within the past 12 months or timing unknown.  Past: abuse of alcohol beyond 12 months or clearly noted as “former” in the chart.  Includes ETOHA (ethanol abuse). |
| Aspiration, history of | Aspiration is the inhalation of oropharyngeal or gastric contents into the lower airways, and can lead to aspiration pneumonia or pneumonitis.  Persons at risk for aspiration and aspiration pneumonia are those with altered consciousness (anything that reduces the gag reflex) neurologic problems and swallowing dysfunction.  This should only be checked if patient’s past medical history notes a history of ‘aspiration’ or ‘aspiration pneumonia’. |
| Asthma | Chronic lung disease in which the airways become narrowed and inflamed.  Note on “Reactive airway disease”. RAD is a term used in young children who have had several episodes of wheezing; it’s a precursor to asthma, but not all persons with RAD with have asthma. Unless “asthma” is stated in the chart, RAD alone would not count as asthma (and would also not count as emphysema or COPD. If a history RAD reported in chart, check the box for RAD. |
| Atherosclerotic cardiovascular disease (ASCVD)/CAD | This is also described as Arteriosclerotic Heart Disease, CAD (coronary artery disease), and CHD (coronary heart disease). Also includes heart attacks and myocardial infarctions. |
| Bone Marrow Transplant | May be indicated as ‘bone marrow transplant’, ‘BMT’ ‘hematopoietic stem cell transplantation’ or ‘HSCT’, ‘peripheral blood stem cell transplantation’ or ‘PBSCT’. |
| Bronchopulmonary Dysplasia (BPD) | A chronic lung disease in premature infants, generally resulting from treatment of respiratory distress syndrome with mechanical ventilation.  Also called Chronic Lung Disease (CLD), however this is a specific term applied to CLD of infancy. This should not be applied to persons noted to have a chronic lung disease such as COPD or asthma. |
| Cerebral Vascular Accident (CVA)/Stroke | Includes any history of CVA or stroke. This does *not* include a history of a TIA (transient ischemic attack). |
| Chronic kidney disease | Chronic renal disease; a progressive loss in renal function over time. Does not include decedents with acute renal failure. Also, not all persons with CKD will be on dialysis. |
| Cirrhosis/Liver failure | This does *not* include hepatitis A, hepatitis B, or hepatitis C infection *without* liver failure and does not include *acute* liver failure. |
| Complement deficiency | Complement deficiencies are a group of disorders in which there is a reduced level of specific proteins that are needed for a normal immune response (“complement”).  Examples of specific complement deficiencies are: C1 qrs deficiency, C3 deficiency, C2-C4 deficiency, C5-9 deficiency. |
| Congenital heart disease | Includes: Ebstein's anomaly, Hypoplastic left heart (HLH), Pulmonary atresia, Tetralogy of Fallot (TOF), Total anomalous pulmonary venous return (TAPVR), Transposition of the great vessels, Tricuspid atresia, Truncus arteriosus, Aortic stenosis, Atrial septal defect (ASD), Atrioventricular canal (endocardial cushion defect), Coarctation of the aorta ("coarc"), Patent ductus arteriosus (PDA), Pulmonic stenosis, Ventricular septa defect (VSD) |
| Current chronic dialysis | Dialysis is a treatment that does some of the things done by healthy kidneys. It is needed when a person’s kidneys can no longer take care of the body's needs.  For this question, the interest is in whether a patient was on “chronic dialysis” before their pertussis infection They may have received “chronic dialysis” either as in inpatient or outpatient. They may have received either “hemodialysis” or “peritoneal dialysis”.  If the patient was placed on dialysis as a result of their infection,DO NOT check this box.  NOTE: “Chronic kidney disease” and “current chronic dialysis” are overlapping variables (either or both may be checked). Indicate whatever is noted in the chart based on the instructions provided. |
| Cystic Fibrosis | An inherited disease of the secretory glands, including the lungs |
| Dementia | Significant loss of brain and/or cognitive function that interferes with daily function.  Includes Alzheimer’s, multi-infarct dementia, and senile dementia. Does not include persons with diminished capacity and/or considered mentally challenged. |
| Diabetes mellitus | Includes either type I *or* type II (both “insulin-dependent” and “adult-onset”). Also includes glucose intolerance and new-onset diabetes. Do **NOT** include decedents noted as “pre-diabetic” or those with gestational diabetes. It is not necessary to look at the results of glucose tolerance test in laboratory results section of the chart for an indication of diabetes.  Common abbreviations: DM, AODM, IDDM, NIDDM. |
| Emphysema/COPD | COPD=chronic obstructive pulmonary disease. Includes chronic bronchitis. |
| Heart failure/CHF | Congestive heart failure, including cardiomyopathy |
| HIV Infection | Not everyone who develops an HIV infection will have AIDS.  If “AIDS” is checked, “HIV Infection” should also be checked. |
| Hodgkin’s Disease/lymphoma | This cancer of the lymph system results in “immunocompromised for life” so should be marked if any history. |
| Immunoglobulin deficiency | Includes syndromes such as SCID (severe combined immunodeficiency), agammaglobulinemia, Ig, IgM, or IgG deficiencies, Wiskott-Aldrich Syndrome. |
| Immunosuppressive therapy (Steroids, Chemotherapy, Radiation) | Treatment with agents, such as X-rays, corticosteroids, or cytotoxic chemicals that suppress a person’s immune response to antigen(s).  Immunosuppressive drugs are most commonly used to prevent rejection of organs and tissues after transplant and to treat autoimmune diseases (such as multiple sclerosis, systemic lupus erythematosus, multiple myeloma, inflammatory bowel disease (i.e., Crohn’s and Ulcerative Colitis), rheumatoid arthritis, psoriasis, etc.) and other inflammatory diseases (i.e., sarcoidosis – note sarcoidosis is not an underlying condition for an ABCs infection).  This should be checked if the chemotherapy is ongoing, if patient is between cycles, or if within 2 weeks of completion.  Use of steroids is considered an underlying disease or condition only if they are long-term systemic steroids (this does NOT include topical creams, steroids used only for short course treatment such as one week, and inhaled steroids used for asthma).  There are numerous brand and generic drug names for immunosuppressive agents. Understanding which conditions persons may be prescribed may help identify the agents. Please see **Appendix 4** for further guidance on specific drug names.  If you are uncertain after review of the list of agents listed in **Table 8** whether the drug should be considered an immunosuppressive agent, especially if the person has one of the conditions listed previously, please contact CDC. |
| IV drug use | Any intravenous drug.  Current: any intravenous drug use within the past 12 months or timing unknown.  Past: any intravenous drug use beyond 12 months or clearly noted as “former” in the chart. |
| Leukemia | A cancer of the hematopoietic system (bone marrow and other blood-forming organs).  This results in an "immunocompromised" condition and includes CML (chronic myelogenous leukemia), CLL (chronic lymphocytic leukemia), AML (acute myelogenous leukemia), ALL (acute lymphocytic leukemia). |
| Multiple Myeloma | This cancer of the hematopoietic system results in "immunocompromised for life" so should be marked if any history**.** |
| Multiple Sclerosis | Chronic autoimmune disease that affects the brain and spinal cord; the body’s immune system attacks myelin. |
| Nephrotic syndrome | Kidney disorder characterized by excessive loss of protein in urine. |
| Neuromuscular disorder | Disorder of the nerves that control voluntary muscles.  Includes muscular dystrophy (MD), myasthenia gravis, and amyotrophic lateral sclerosis (ALS), cerebral palsy (CP), reflex sympathetic dystrophy (RSD). |
| Obesity | The condition of being significantly overweight. Obesity has been defined by the National Institutes of Health (the NIH) as a BMI of 30 and above.  The obesity variable should not be checked in the underlying conditions section if there is no mention of obesity in the chart. (Calculating an obese BMI value using the height and weight data should not be used to complete this variable.) |
| Other drug use | Any illicit drug use other than intravenous drug use.  Current: any illicit drug use within the past 12 months or timing unknown.  Past: any illicit drug use beyond 12 months or clearly noted as “former” in the chart.  Please include decedents treated with or noted to have used “medical marijuana” or methadone in this group. |
| Parkinson’s disease | Degenerative disorder of the central nervous system due to insufficient dopamine. |
| Peripheral neuropathy | Dysfunction of the peripheral nerves.  Includes Charcot-Marie-Tooth Syndrome, Guillain-Barre Syndrome |
| Plegias/paralysis | Paralysis of extremities.  Includes quadraplegias (paralysis of all four limbs), paraplegias (paralysis of legs) and hemiplegia (paralysis of one side of the body). |
| Pulmonary hypertension | Pulmonary hypertension occurs when the blood pressure in the pulmonary arteries is higher than normal.  This is not the same diagnosis as the systemic form of hypertension (‘high blood pressure’, HTN). |
| Reactive Airway Disease (RAD) | Sometimes, particularly in infants, their medical chart will read “6 month old male with one prior history of wheezing”. This may not be specifically stated to be Reactive Airway Disease, but should be included. |
| Seizure/Seizure disorder | Uncontrolled electrical activity of the brain.  Includes epilepsy. Does NOT include febrile seizures. |
| Sickle Cell Anemia | Includes persons with HbSS, HbSC or HbS-beta thalassemia. Common abbreviations: SCD, SS disease, SC disease. |
| Smoking | Current: smoked within the past 12 months or timing unknown.  Past: last smoked > 12 months or clearly noted as “former” in the chart.  Includes a smoker of cigarettes or cigars, but does not include smoking crack or other illicit drugs. Smoking crack or other illicit drugs should be listed under “other drug use”. (If a person quit smoking *within the past 12 months*, consider this person a current smoker.)  Does NOT include those being treated with or noted to have used “medical marijuana”. |
| Solid organ malignancy | Malignancy of a solid organ such as liver, kidney, pancreas, heart, lung, or of other organs such as colon, bladder, and skim melanoma (excludes non-melanomatous skin cancer and *in situ* cervical carcinoma). |
| Splenectomy/Asplenia | Absence of spleen or absence of spleen function. |
| Systemic Lupus Erythematosus (SLE) | Includes SLE or lupus. |
| Other chronic lung conditions | Includes chronic lung diseases OTHER THAN asthma, COPD, cystic fibrosis, bronchopulmonary dysplasia (BPD), pulmonary hypertension, and aspiration pneumonia.  Examples of chronic lung diseases in this category are chronic bronchitis, bronchiectasis, alveolitis, post inflammatory pulmonary fibrosis, chronic airway obstruction, pneumoconiosis, ventilator-dependent, tracheamalacia, hituberculosis, emphysema thoracis, bronchiolitis obliterans, and interstitial lung disease. |

| APPENDIX 3: Pertussis Vaccines | | |
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| **Vaccine Types** | **Brand Names** | **Manufacturers** |
| DTaP  DTaP-Hib  DTaP-IPV-Hib  DTaP-IPV  DTP (Whole Cell)  DTP-Hib  DT or Td  Tdap | Infanrix  Pediarix  Kinrix  Boostrix  Daptacel  Pentacel  Tripedia  Adacel  TriHIBit  Acel-Immune | Sanofi  GSK  Wyeth  Aventis  Connaught  North American Vaccine |