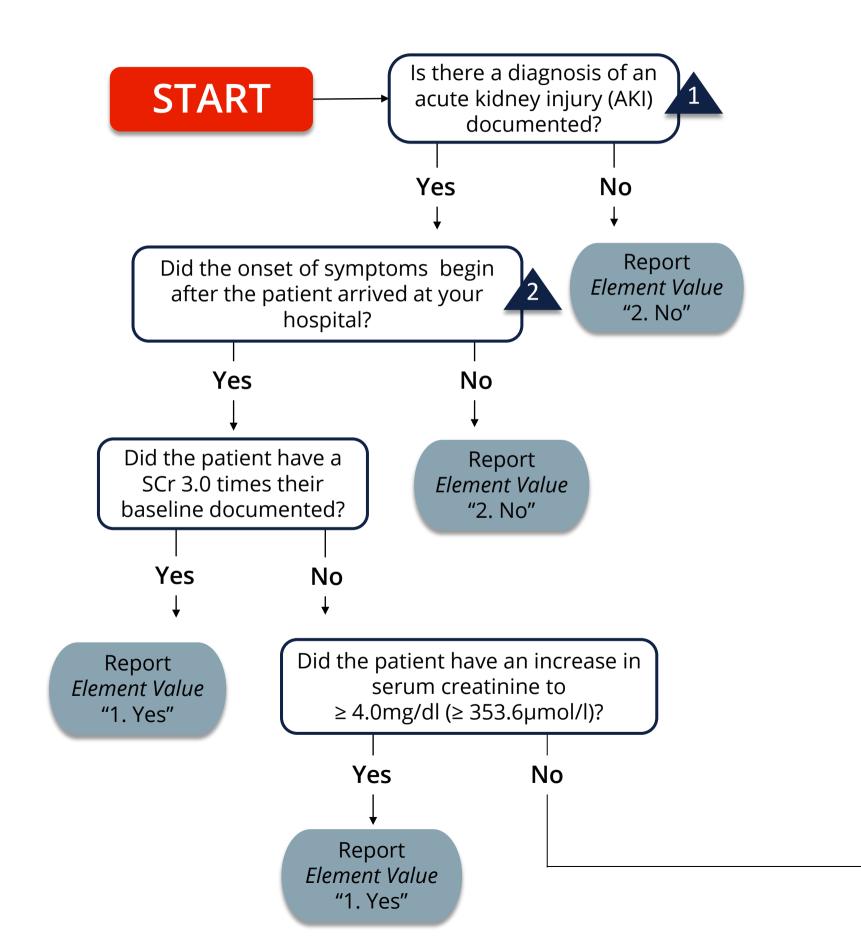
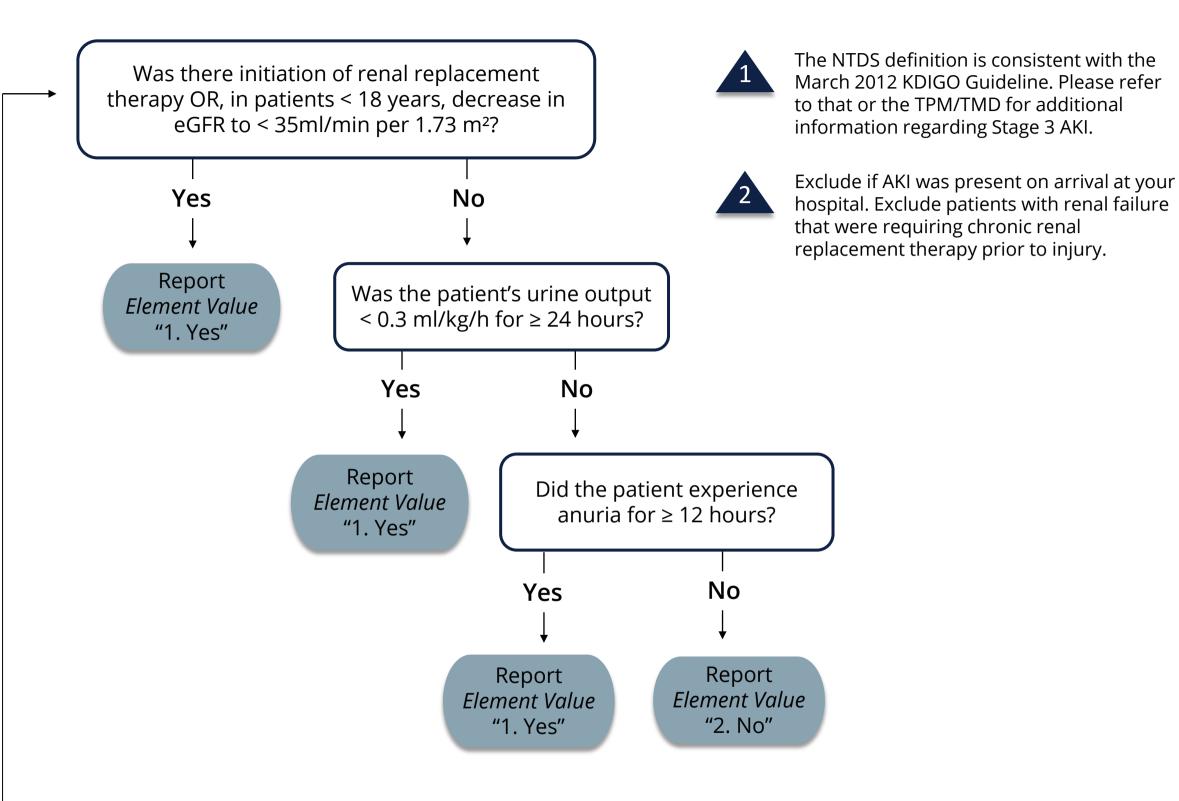
Acute Kidney Injury

2024 NTDS Hospital Event Algorithm

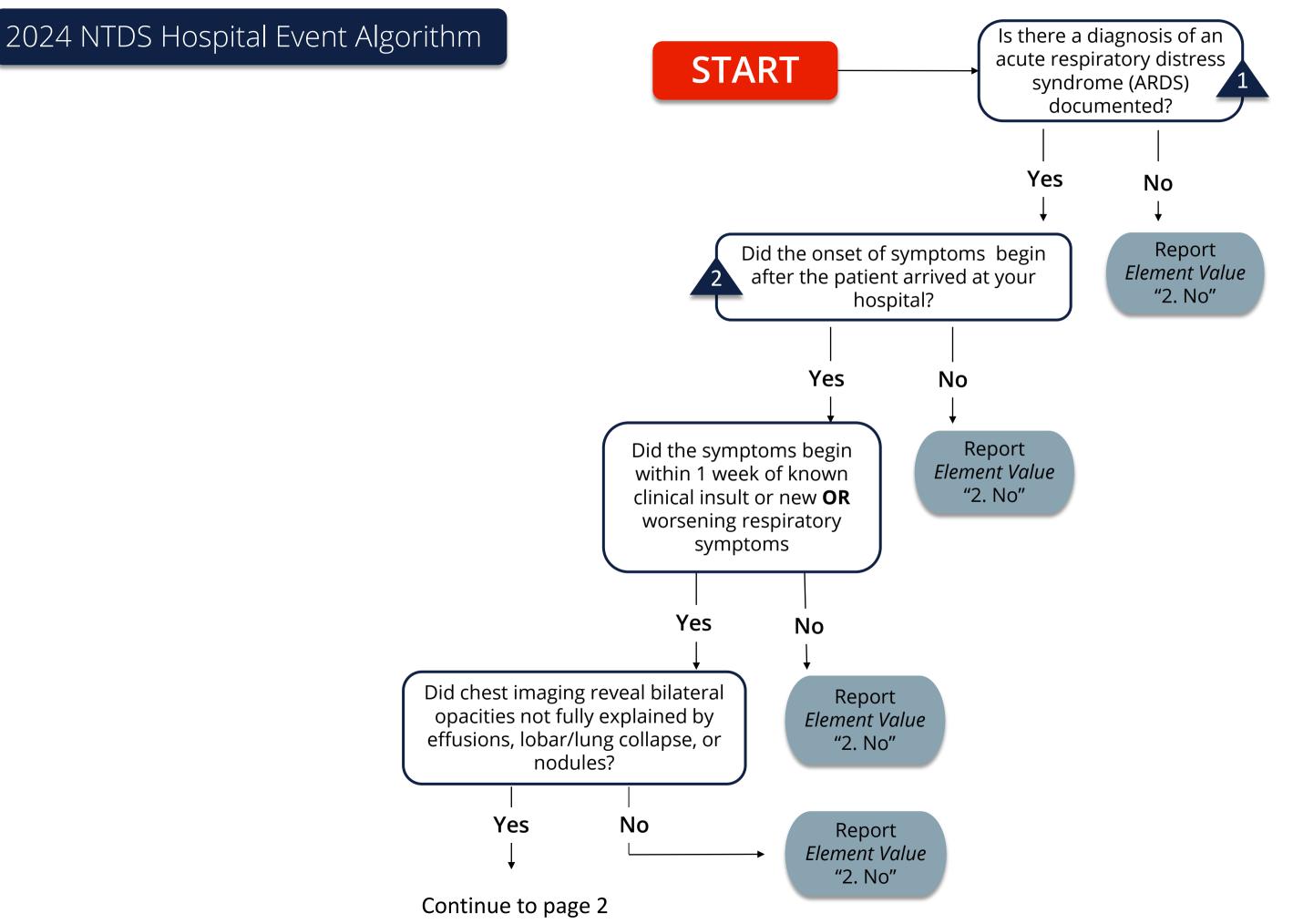




Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Acute Respiratory Distress Syndrome (ARDS) (pg. 1 of 2)





The NTDS definition of ARDS is consistent with the 2012 New Berlin Definition.



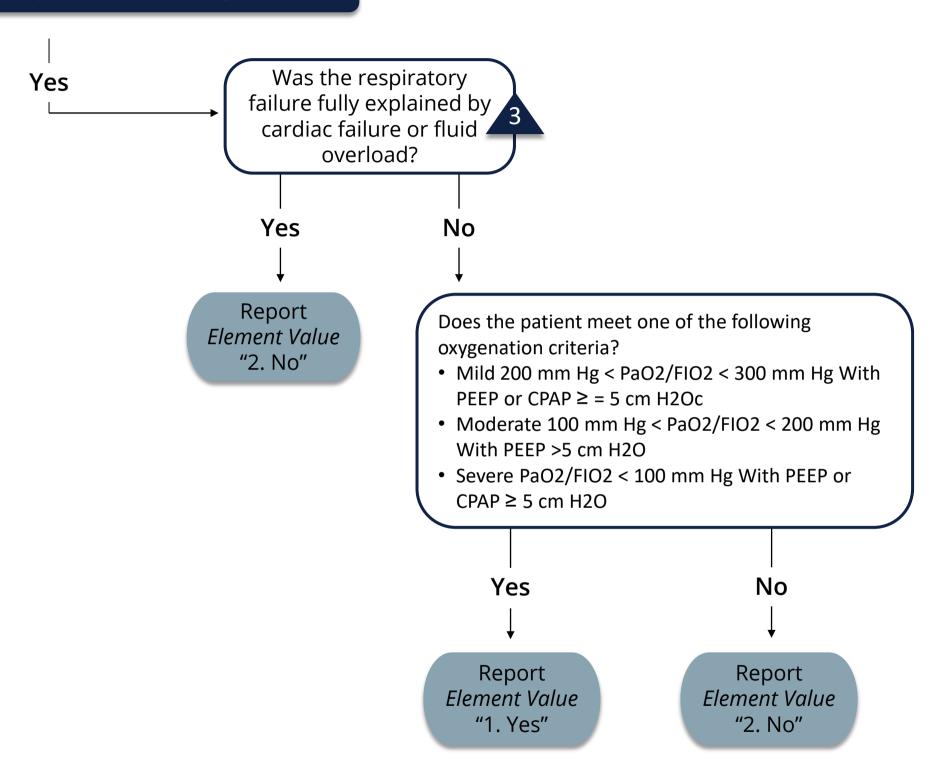
Exclude if ARDS was present on arrival at your hospital.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



ACUTE Respiratory Distress Syndrome (ARDS) (pg. 2 of 2)

2024 NTDS Hospital Event Algorithm





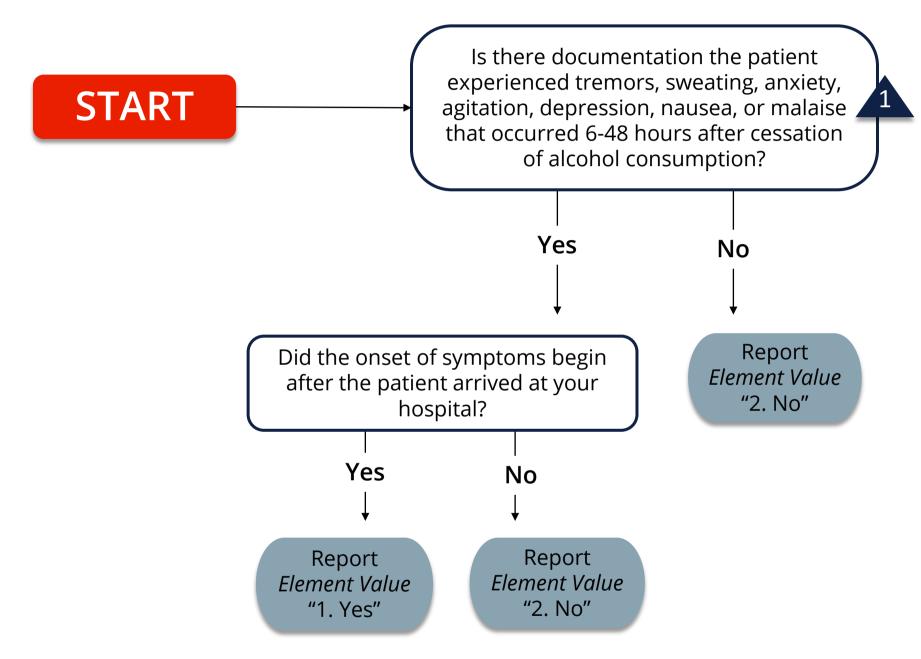
Need objective assessment (e.g., echocardiography) to exclude hydrostatic edema if no risk factor present.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Alcohol Withdrawal Syndrome

2024 NTDS Hospital Event Algorithm





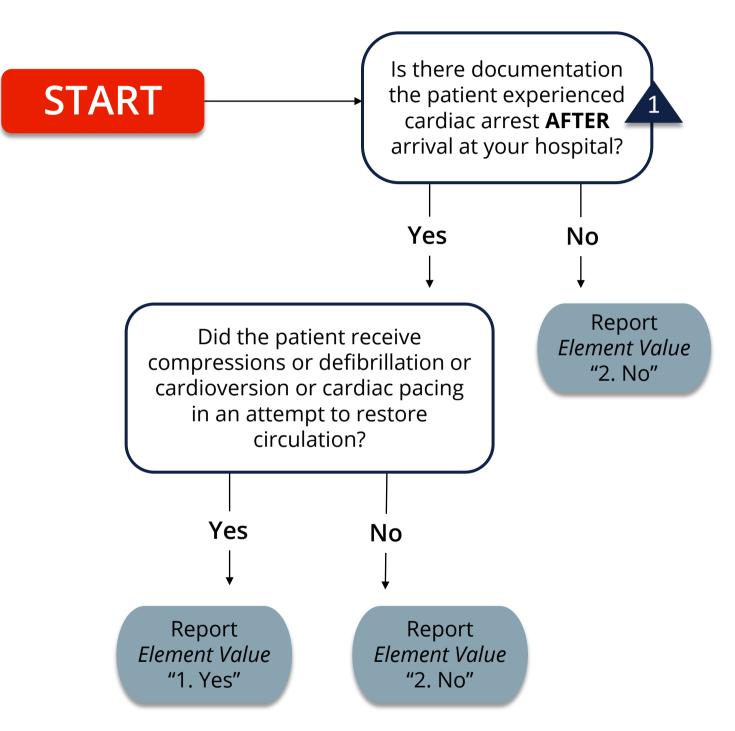
Note that a diagnosis of alcohol withdrawal syndrome is not required by the NTDS definition.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Cardiac Arrest with CPR

2024 NTDS Hospital Event Algorithm





Cardiac arrest is the sudden cessation of cardiac activity after hospital arrival. The patient becomes unresponsive with no normal breathing and no signs of circulation. If corrective measures are not taken rapidly, this condition progresses to sudden death.

EXCLUDE patients whose ONLY episode of cardiac arrest with CPR was on arrival to your hospital.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Catheter-associated Urinary Tract Infection (CAUTI) SUTI 1a (Patients >1 year of age)

"2. No"

2024 NTDS Hospital Event Algorithm The NTDS definition is consistent with the January 2019 CDC CAUTI definition. If information not contained in the NTDS Was the indwelling urinary catheter Yes definition is needed, please refer to the in place on the date of event **OR** the Is there a diagnosis of UTI CDC or your hospital's infection control **START** day before? documented? department. Yes No The Date of Event is the date the first Yes No element used to meet an NHSN sitespecific infection criterion occurs for the first time within the seven-day infection Report Did the patient experience any of window period. The day of device Did the onset of symptoms Report Element Value the following signs/symptoms: placement is Day 1. begin after the patient arrived Element Value "2. No" • Fever (>38°C) at your hospital? "2. No" Suprapubic tenderness • Costovertebral angle pain or Yes No tenderness Urinary urgency Urinary frequency Did the patient have an indwelling Report Dysuria urinary catheter during their initial Element Value "2. No" stay at your hospital? Yes No Yes No Did the patient have a Report urine culture with no Element Value more than two species Was the indwelling urinary Report "2. No" catheter in place for >2 days on Element Value of organisms identified, the date of event? at least one which is a "2. No" bacterium >10⁵ CFU/ml? Yes No Yes No Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information Report **Trauma Quality Programs** Report Report Element Value American College of Surgeons

Element Value

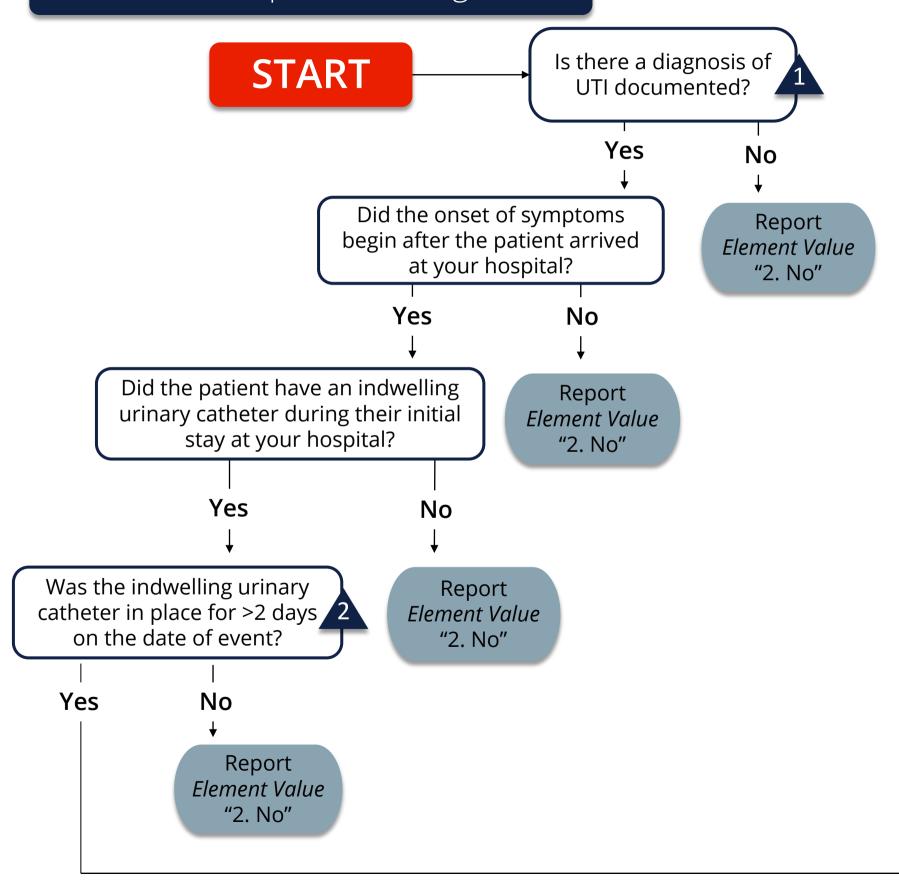
"1. Yes"

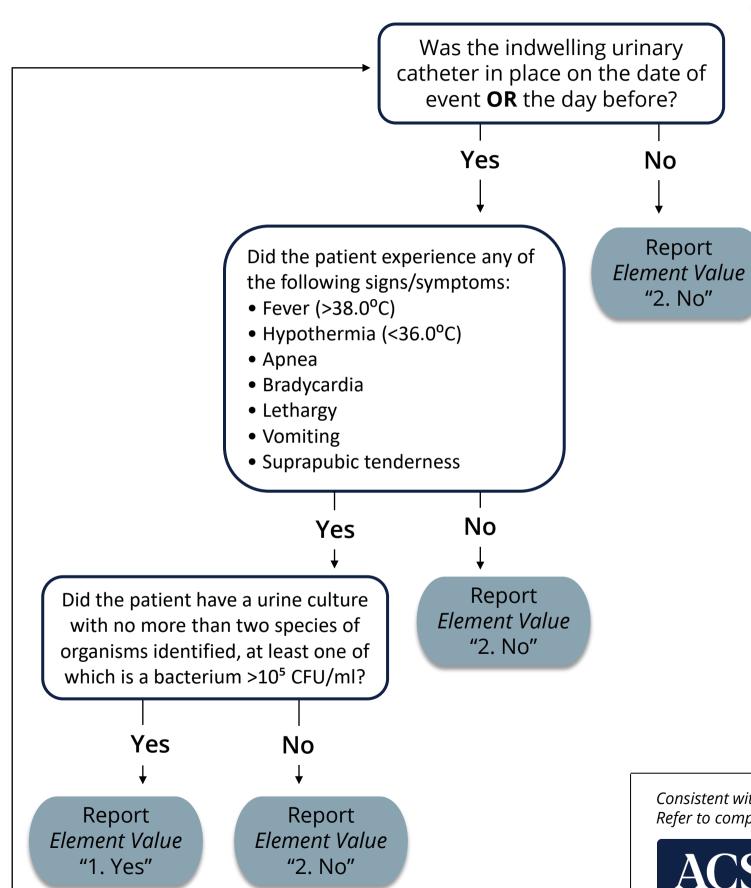
Element Value

"2. No"

Catheter-associated Urinary Tract Infection (CAUTI) SUTI 2 (Patients ≤ 1 year of age)

2024 NTDS Hospital Event Algorithm





The NTDS definition is consistent with the January 2019 CDC CAUTI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

The Date of Event is the date the first element used to meet an NHSN sitespecific infection criterion occurs for the first time within the seven-day infection window period. The day of device placement is Day 1.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



No

Report

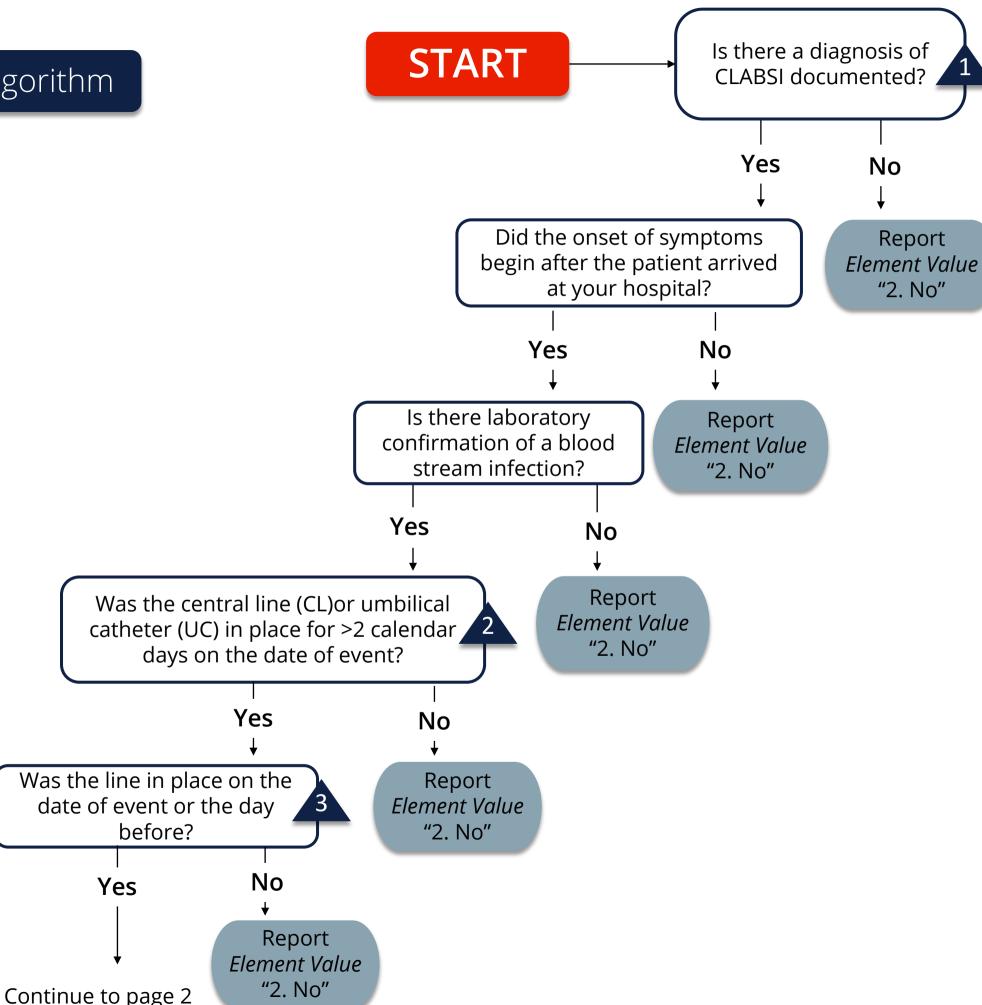
"2. No"

Trauma Quality Programs American College of Surgeons

Central Line-Associated Blood Stream Infection (CLABSI)

(pg. 1 of 3)

2024 NTDS Hospital Event Algorithm





The NTDS definition is consistent with the January 2016 CDC CLABSI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.



The Date of Event is the date the first element used to meet an NHSN site-specific infection criterion occurs for the first time within the seven-day infection window period. The day of device placement is Day 1.



If a CL or UC was in place for > 2 calendar days and then removed, the date of event of the LCBI must be the day of discontinuation or the next day to be a CLABSI. If the patient is admitted or transferred into a facility with an implanted central line (port) in place, and that is the patient's only central line, day of first access in an inpatient location is considered Day 1. "Access" is defined as line placement, infusion or withdrawal through the line. Such lines continue to be eligible for CLABSI once they are accessed until they are either discontinued or the day after patient discharge (as per the Transfer Rule). Note that the "de-access" of a port does not result in the patient's removal from CLABSI surveillance.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Trauma Quality ProgramsAmerican College of Surgeons

Central Line-Associated Blood Stream Infection (CLABSI) (pg. 2 of 3) LCBI 1: Did the patient have a Criterion elements must occur within the Yes recognized pathogen identified Infection Window Period, the 7-day time 2024 NTDS Hospital Event Algorithm from one or more blood period which includes the collection date of the positive blood, the 3 calendar specimens? days before and the 3 calendar days Yes after. No Did the patient have organism(s) LCBI 2: Did the patient have at least one identified in blood not related to of the following signs or symptoms: fever (>38°C), chills, or hypotension? an infection at another site? Yes Yes No No LCBI 3: Is the patient Did the patient have Report See organism(s) identified from \leq 1 years of age? Element Value LCBI 2 blood not related to an "1. Yes" infection at another site? No Yes No Yes Report Element Value Were the same common commensal organisms "2. No" See identified from two or more blood specimens drawn on LCBI 3 separate occasions, by a culture or non-culture based microbiologic testing method which is performed for Did the patient have at least one of the following signs purposes of clinical diagnosis or treatment? or symptoms: fever (>38° C), hypothermia (<36°C), apnea, or bradycardia? Yes No No Yes Report Consistent with the most recent version of the 2024 NTDS Data Dictionary See Report Element Value Refer to complete NTDS definition for additional information LCBI 3

"1. Yes"

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Trauma Quality Programs

American College of Surgeons

Element Value

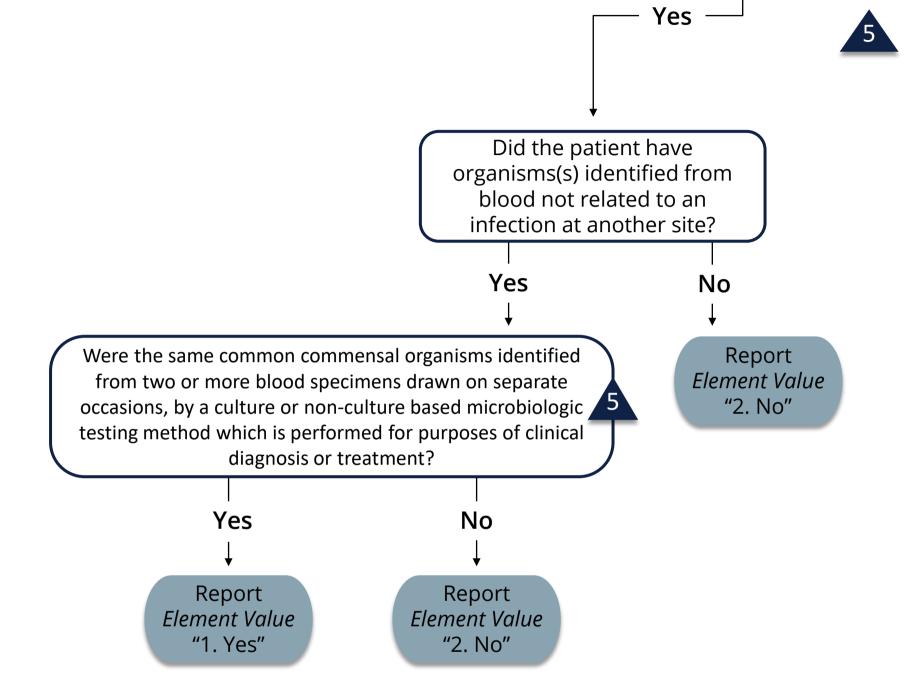
"2. No"

Continue to page 3

Central Line-Associated Blood Stream Infection (CLABSI)

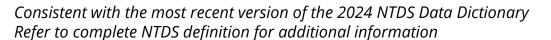
(pg. 3 of 3)

2024 NTDS Hospital Event Algorithm



Infection Window Period, the 7-day time period which includes the collection date of the positive blood, the 3 calendar days before and the 3 calendar days after.

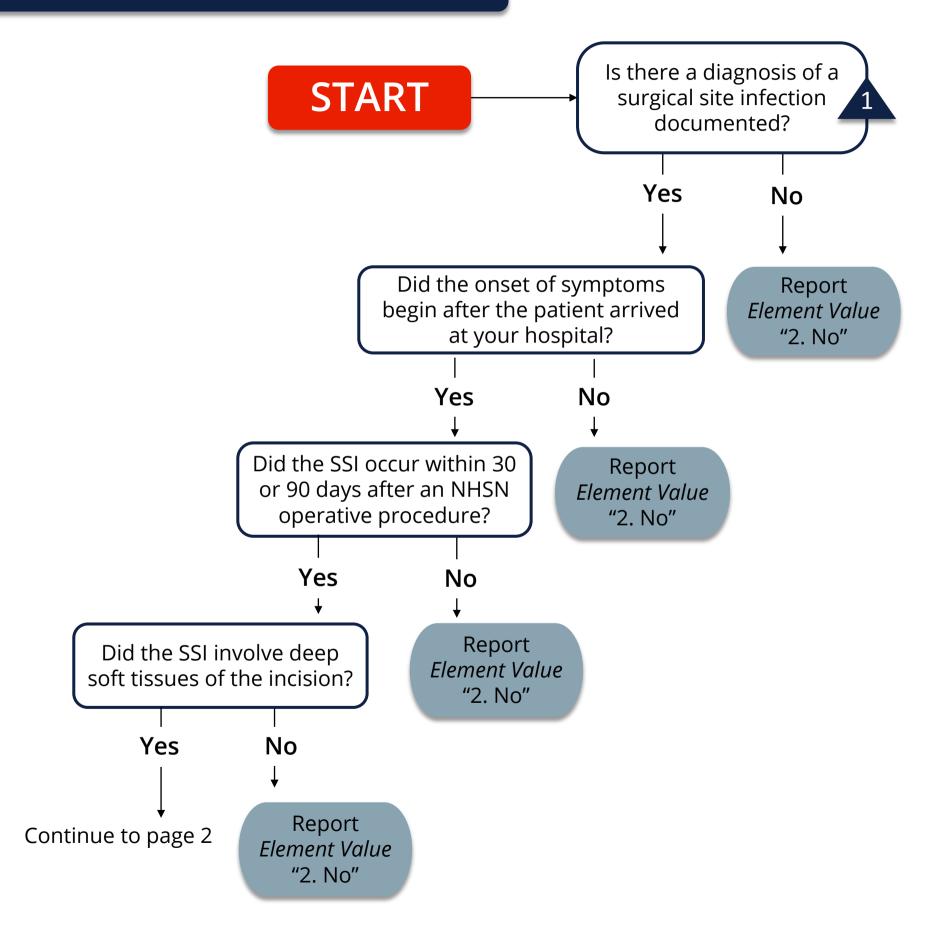
Criterion elements must occur within the





Deep Surgical Site Infection (Deep SSI) (pg. 1 of 2)

2024 NTDS Hospital Event Algorithm





The NTDS definition is consistent with the January 2019 CDC SSI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Deep Surgical Site Infection (Deep SSI) (pg. 2 of 2)

2024 NTDS Hospital Event Algorithm

Yes

Did the patient have at least *one* of the following:

- a. Purulent drainage from the deep incision.
- b. A deep incision that spontaneously dehisces, or is deliberately opened or aspirated by a surgeon, **attending physician** or other designee

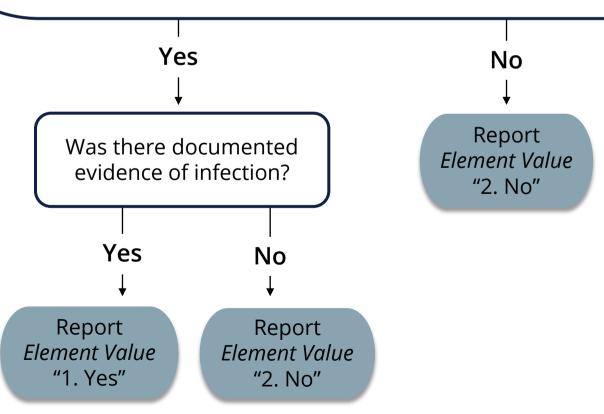
AND

organism(s) identified from the deep soft tissues of the incision by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST)) or culture or non-culture based test from the deep soft tissues of the incision that has a negative finding does not meet this criterion.

AND

Patient has at least **one** of the following signs or symptoms: fever (>38 °C); localized pain or tenderness.

c. An abscess or other evidence of infection involving the deep incision that
is detected on gross anatomical or histopathological exam, or imaging
test.





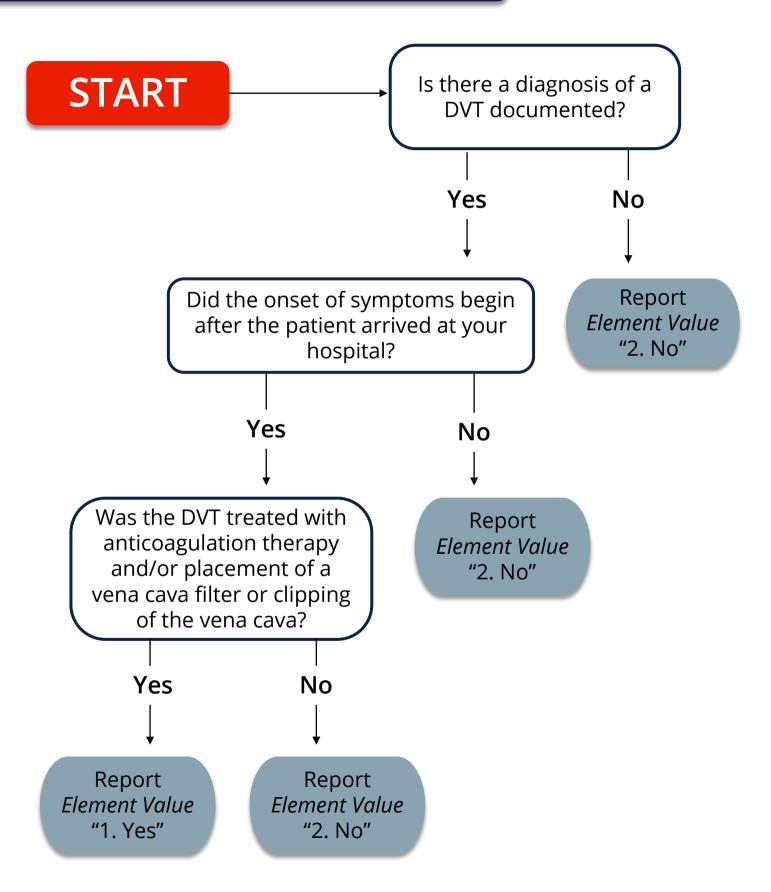
The term **attending physician** for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician, or physician's designee (nurse practitioner or physician's assistant).

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Deep Vein Thrombosis (DVT)

2024 NTDS Hospital Event Algorithm

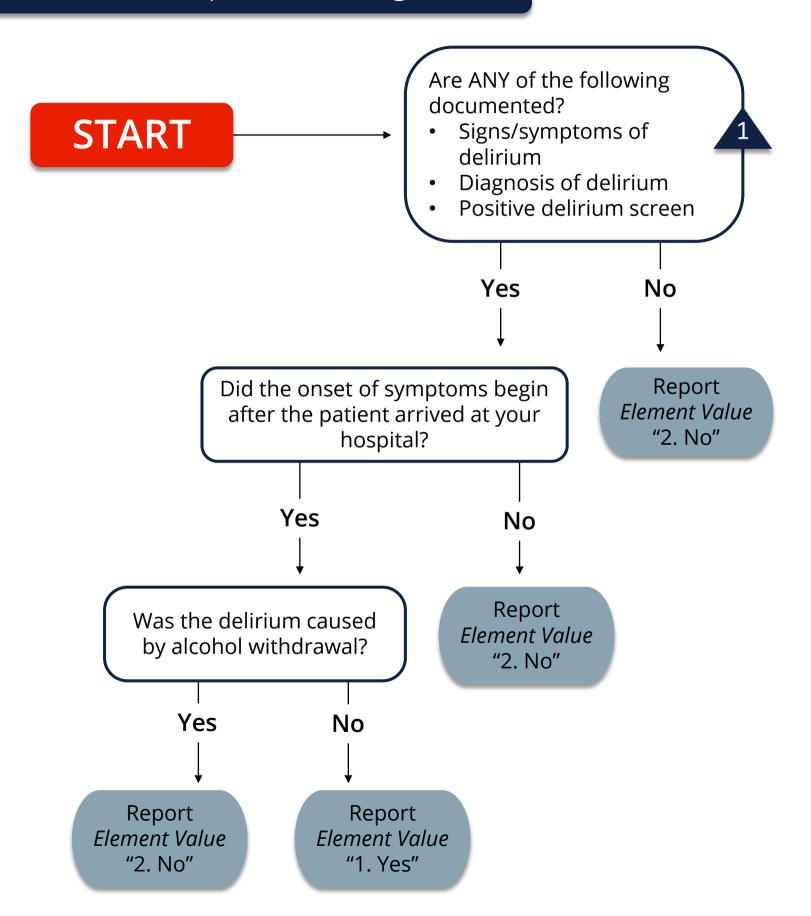


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Delirium

2024 NTDS Hospital Event Algorithm





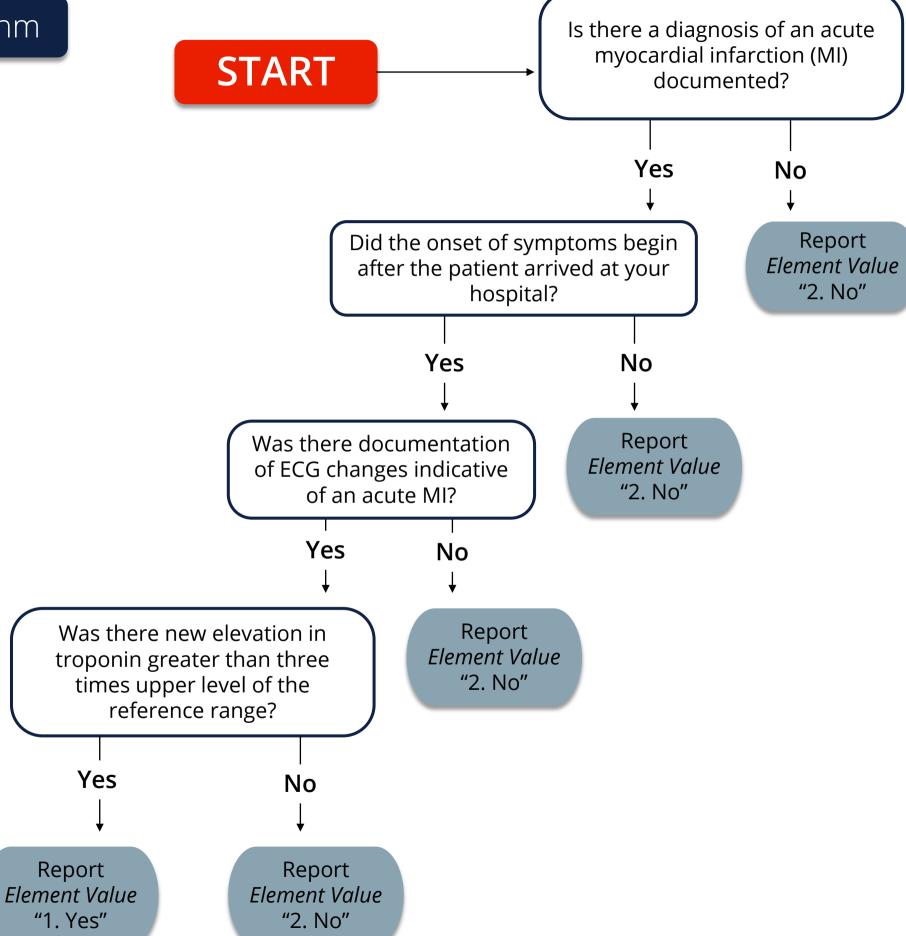
Delirium can often be traced to one or more contributing factors, such as a severe or chronic medical illness, changes in your metabolic balance (such as low sodium), medication, infection, surgery, or alcohol or drug withdrawal.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Myocardial Infarction

2024 NTDS Hospital Event Algorithm

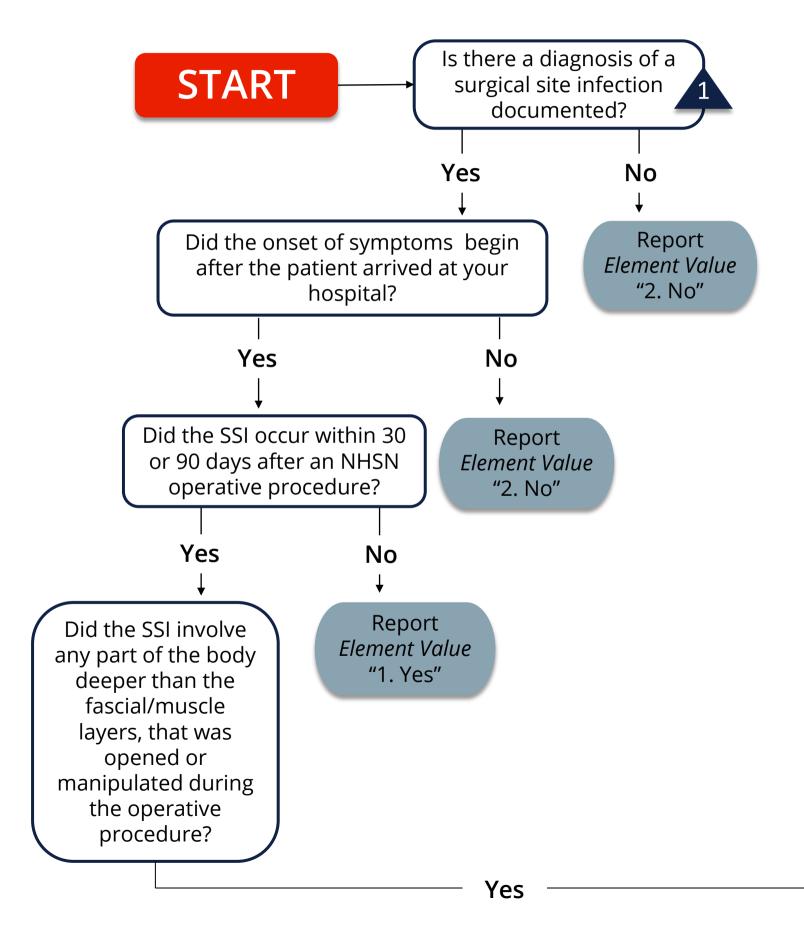


Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



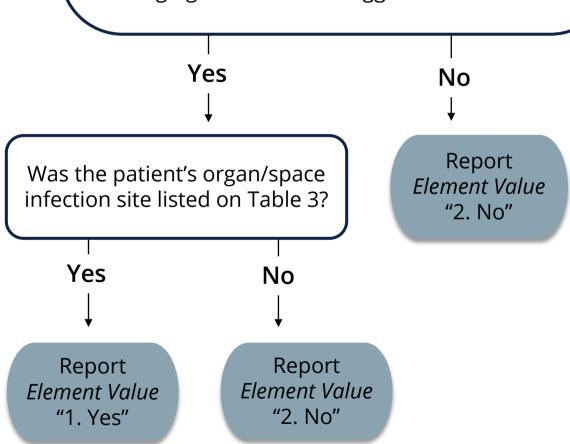
Organ/Space Surgical Site Infection (O/S SSI)

2024 NTDS Hospital Event Algorithm



Did the patient have at least ONE of the following:

- Purulent drainage from a drain that is placed into the organ/space?
- Organisms identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment
- An abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test evidence suggestive of infection





The NTDS definition is consistent with the January 2019 CDC SSI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

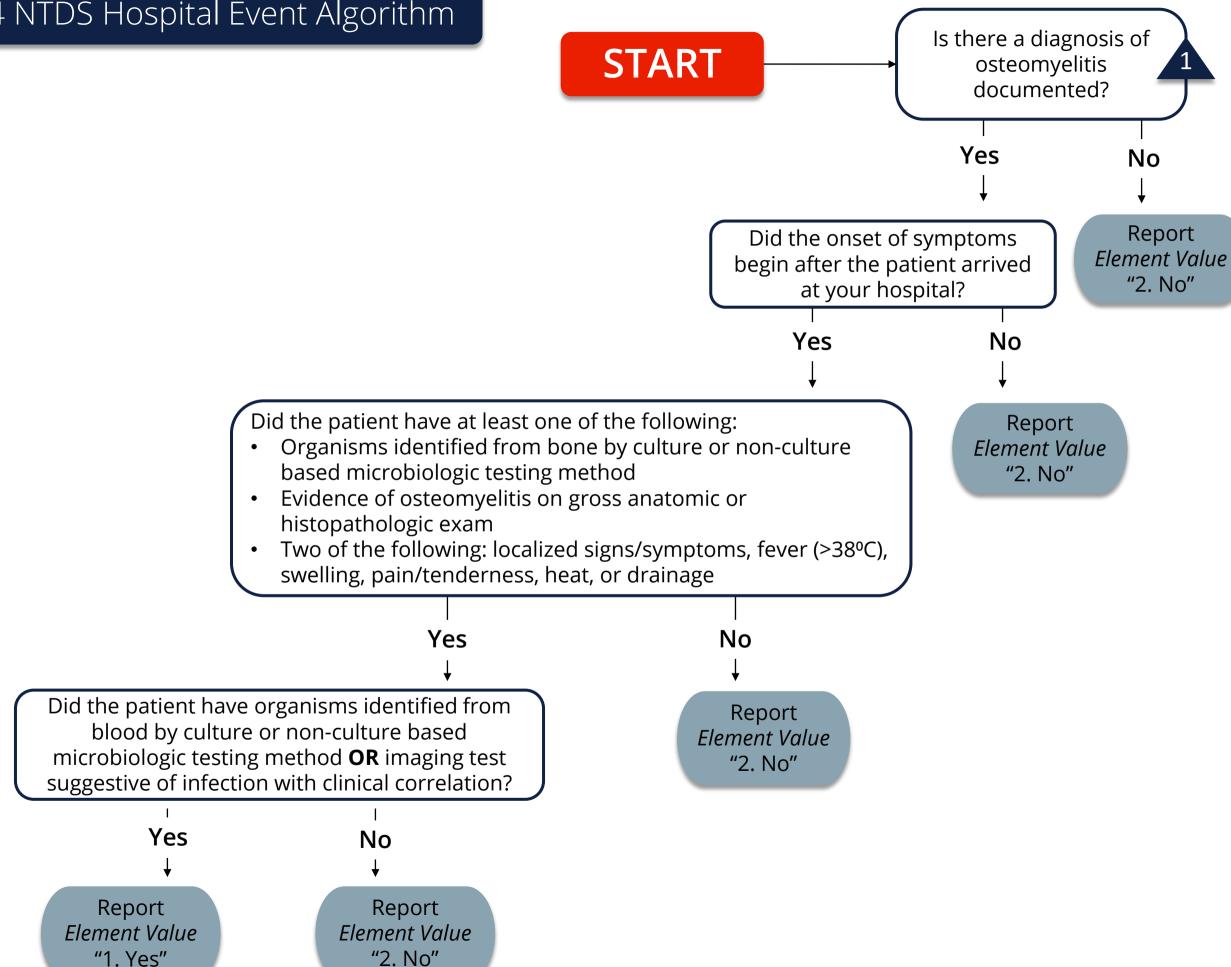
Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Trauma Quality ProgramsAmerican College of Surgeons

Osteomyelitis

2024 NTDS Hospital Event Algorithm





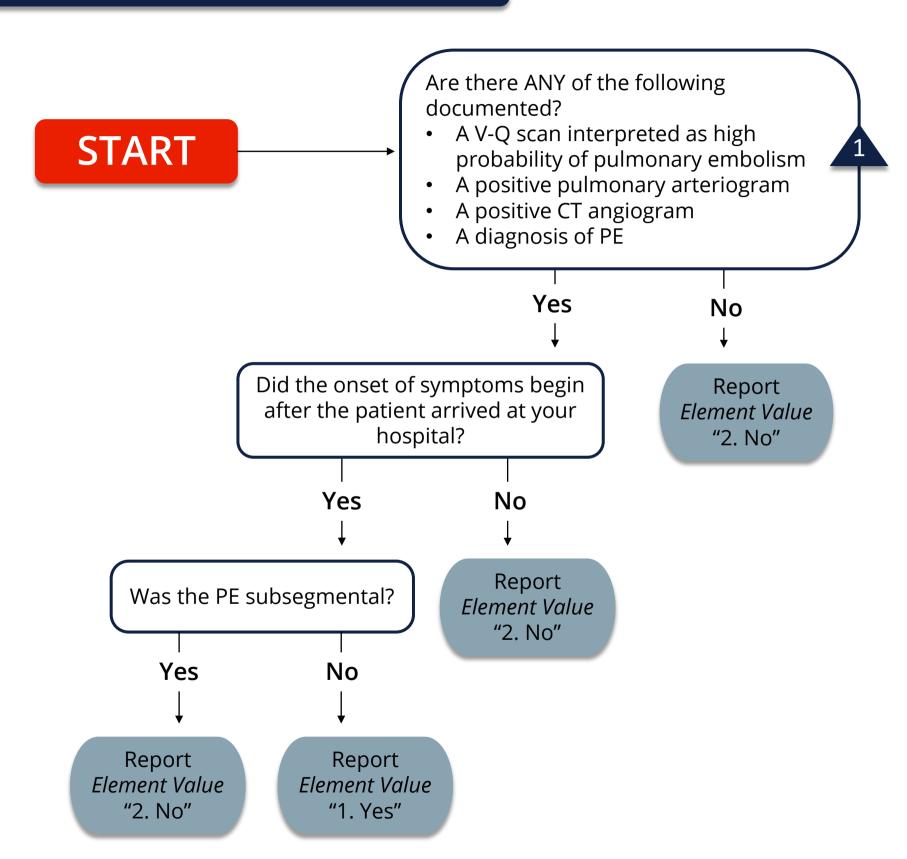
The NTDS definition is consistent with the January 2020 CDC Bone and Joint Infection definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Pulmonary Embolism (PE)

2024 NTDS Hospital Event Algorithm





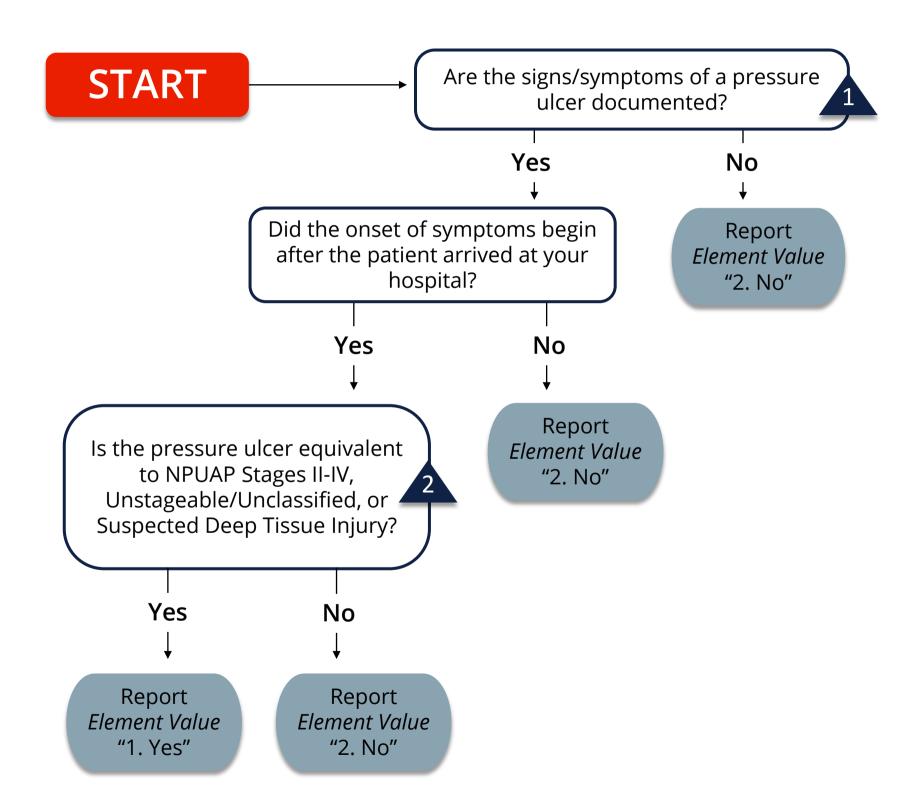
Subsegmental PEs are excluded from the NTDS definition of PE.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Pressure Ulcer

2024 NTDS Hospital Event Algorithm





A pressure ulcer is a localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear. A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated.



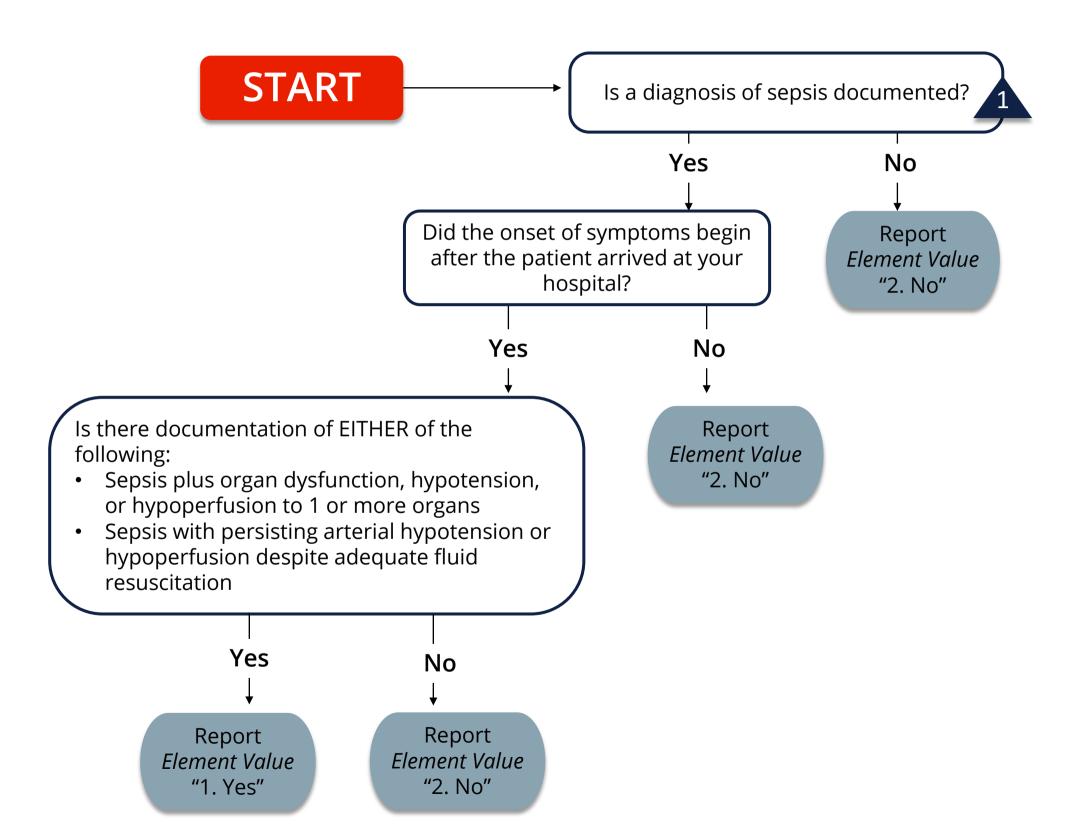
The NTDS definition is consistent with the NPUAP 2014.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Severe Sepsis

2024 NTDS Hospital Event Algorithm





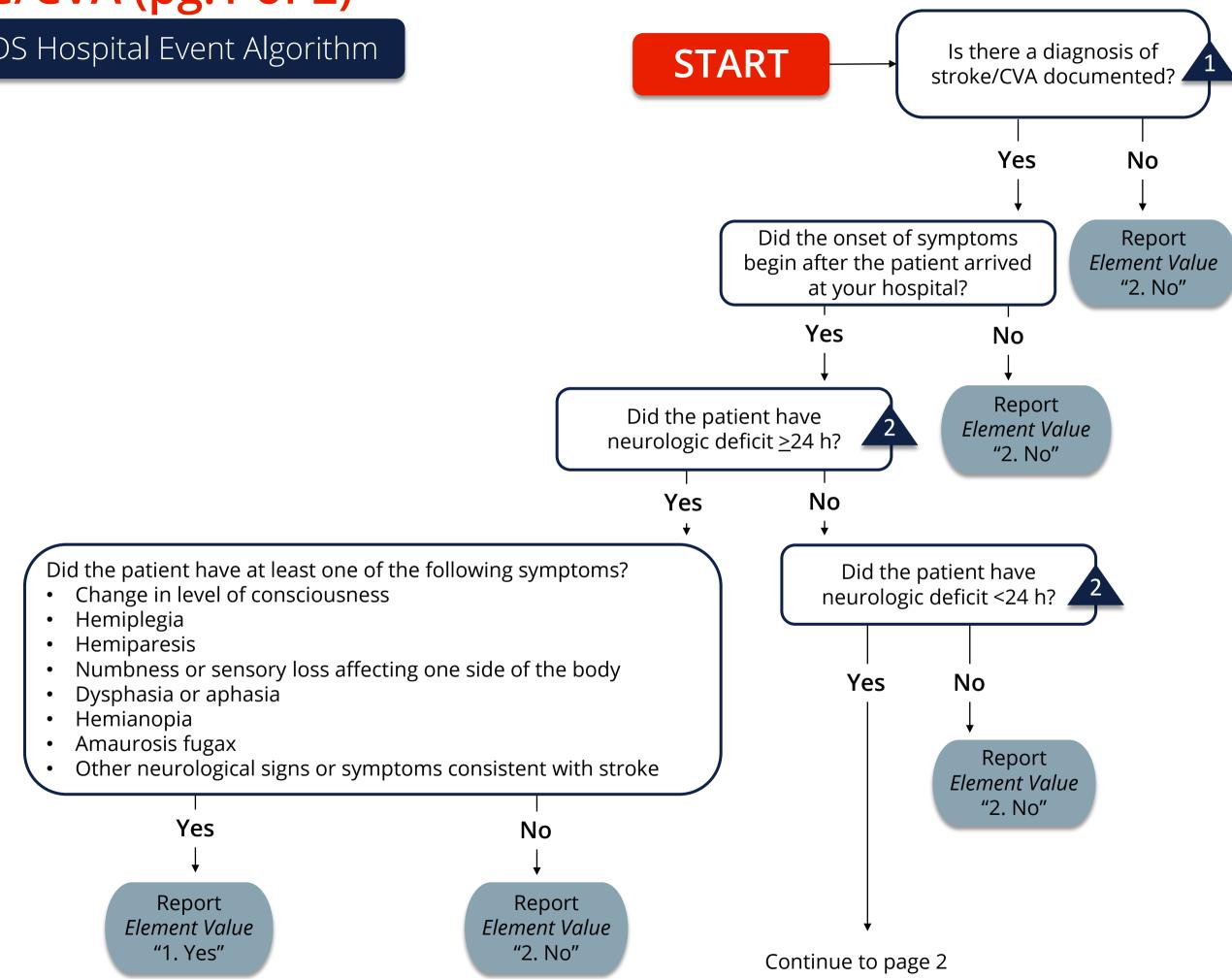
The NTDS definition is consistent with the American College of Chest Physicians and the Society of Critical Care Medicine October 2010.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Stroke/CVA (pg.1 of 2)

2024 NTDS Hospital Event Algorithm





A focal or global neurological deficit of rapid onset and NOT present on admission caused by a clot obstructing the flow of blood to the brain (ischemic stroke). Or by a blood vessel rupturing and preventing blood flow to the brain (hemorrhagic stroke). Or a transient ischemic attack which is temporarily caused by a temporary clot.



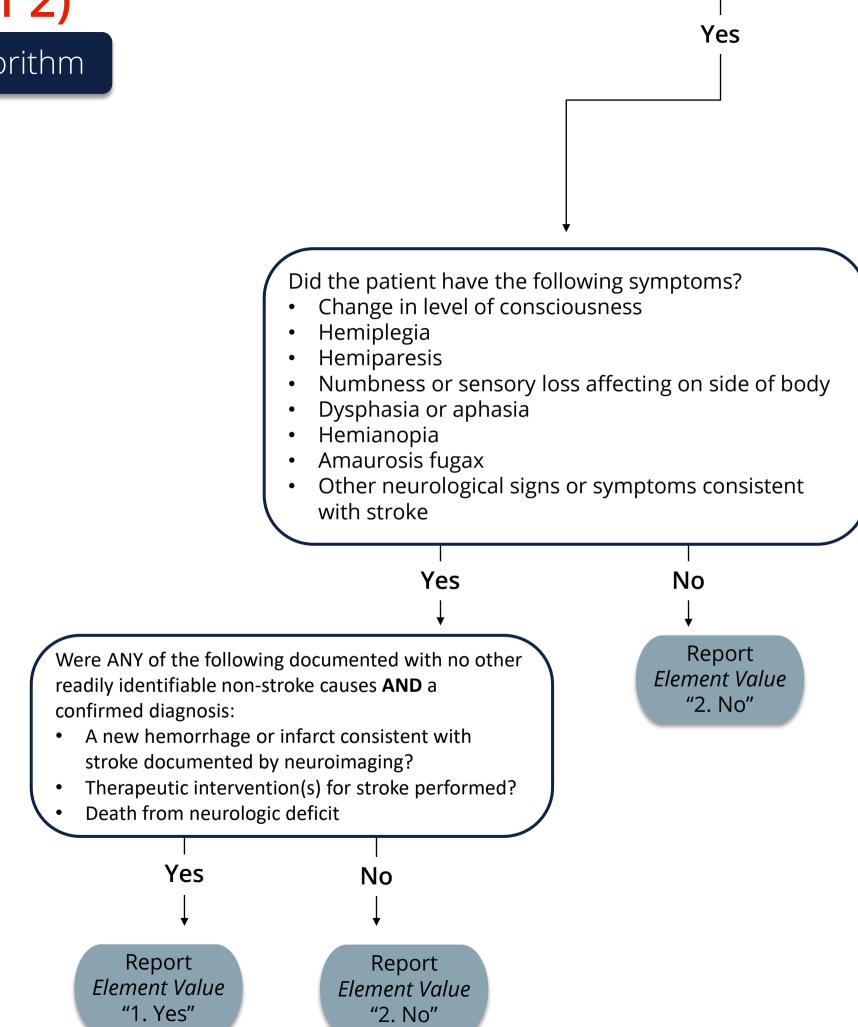
Although the neurologic deficit must not present on admission, risk factors predisposing to stroke (e.g., blunt cerebrovascular injury, dysrhythmia) may be present on admission.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Stroke/CVA (pg. 2 of 2)

2024 NTDS Hospital Event Algorithm

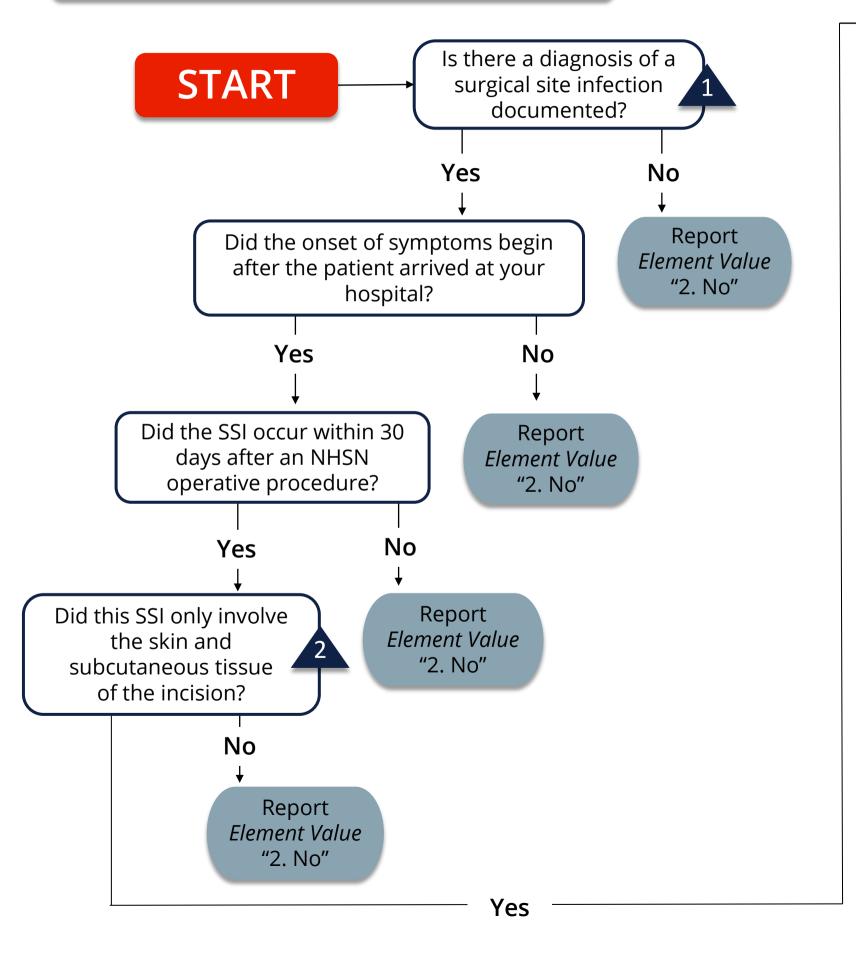


Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



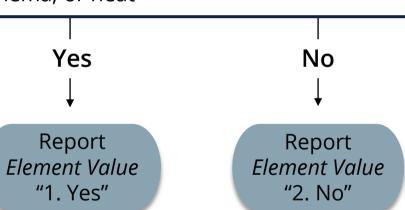
Superficial Incisional Surgical Site Infection (S/I SSI)

2024 NTDS Hospital Event Algorithm



Did the patient have at least ONE of the following:

- Purulent drainage from the superficial incision
- Organisms identified from an aseptically-obtained specimen from the superficial incision or sub cutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment
- A superficial incision that was deliberately opened by a surgeon, attending physician or other designee and culture or non-culture-based testing is not performed **AND** at least one of the following signs or symptoms: pain or tenderness; localized swelling; erythema; or heat





The NTDS definition is consistent with the January 2019 CDC SSI definition. If information not contained in the NTDS definition is needed, please refer to the CDC or your hospital's infection control department.



There are two specific types of superficial incisional SSIs:

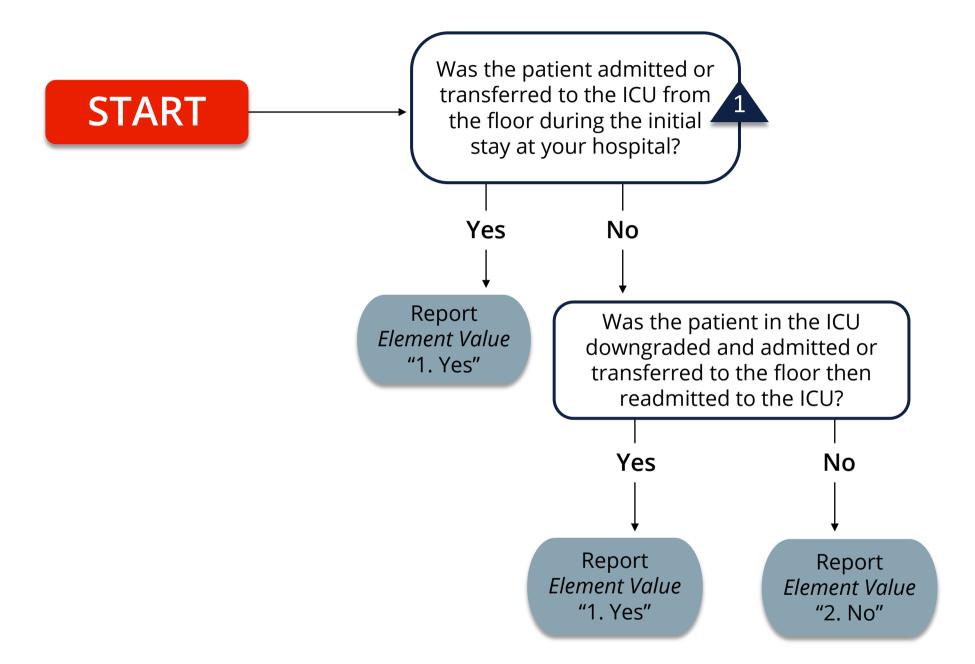
- 1. Superficial Incisional Primary (SIP) a superficial incisional SSI that is identified in the primary incision in a patient that has had an operation with one or more incisions (e.g., C-section incision or chest incision for CBGB)
- 2. Superficial Incisional Secondary (SIS) a superficial incisional SSI that is identified in the secondary incision in a patient that has had an operation with more than one incision (e.g., donor site incision for CBGC)

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Unplanned Admission to the ICU

2024 NTDS Hospital Event Algorithm





Floor is defined as any other ward that is not an ICU. "Floor" also includes step-down units and the operating room for the purposes of this definition.

EXCLUDE: Patients with a planned post-operative ICU stay. This means that it was known prior to surgery that the patient would require post-operative ICU care.

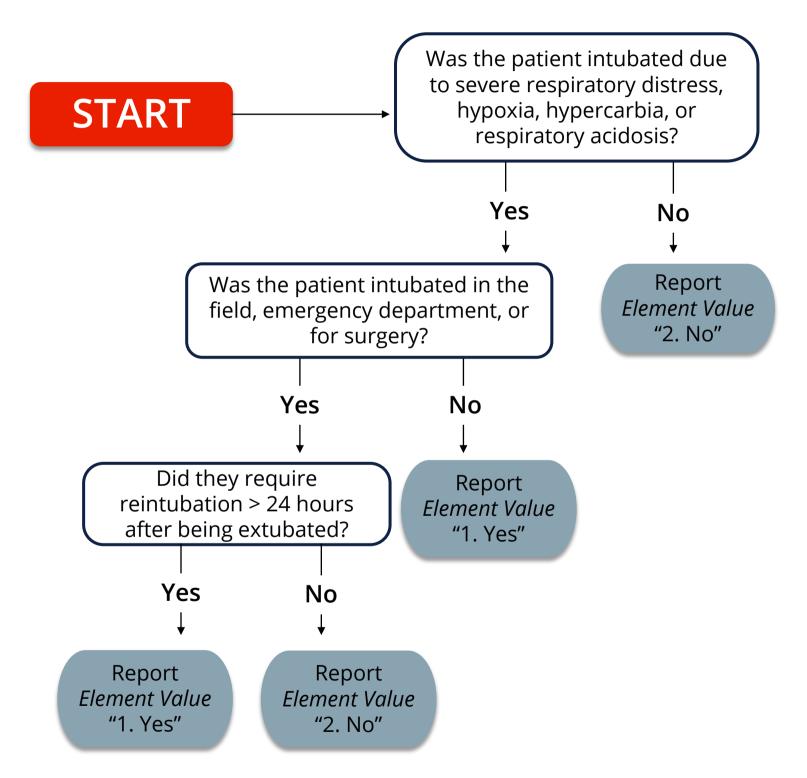
INCLUDE: Patients who required ICU care due to an event that occurred during surgery or in the PACU.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Unplanned Intubation

2024 NTDS Hospital Event Algorithm

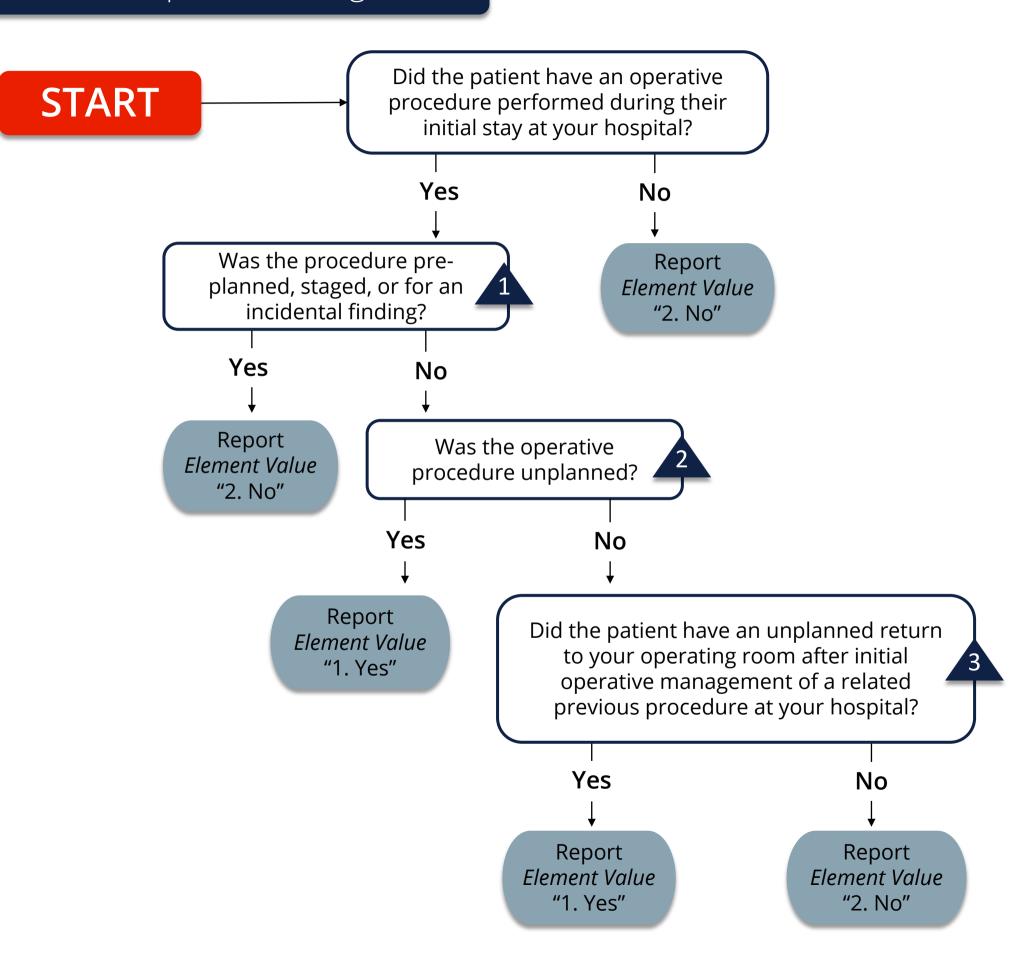


Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Unplanned Visit to the Operating Room

2024 NTDS Hospital Event Algorithm





A pre-planned procedure is a procedure indicated in the patient's original plan of care.



An unplanned procedure is a procedure that was not indicated in the patient's original plan of care.

EXCLUDE: Non-urgent tracheostomy and percutaneous endoscopic gastrostomy.



EXCLUDE: Operative management of related procedures performed prior to arrival at your hospital.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Ventilator-Associated Pneumonia (VAP) PNU2 Bacterial of Filamentous Fungal Pathogens (pg. 1 of 2)

2024 NTDS Hospital Event Algorithm

least **one** of the following?:

Pneumatoceles, in infants ≤1-year-old

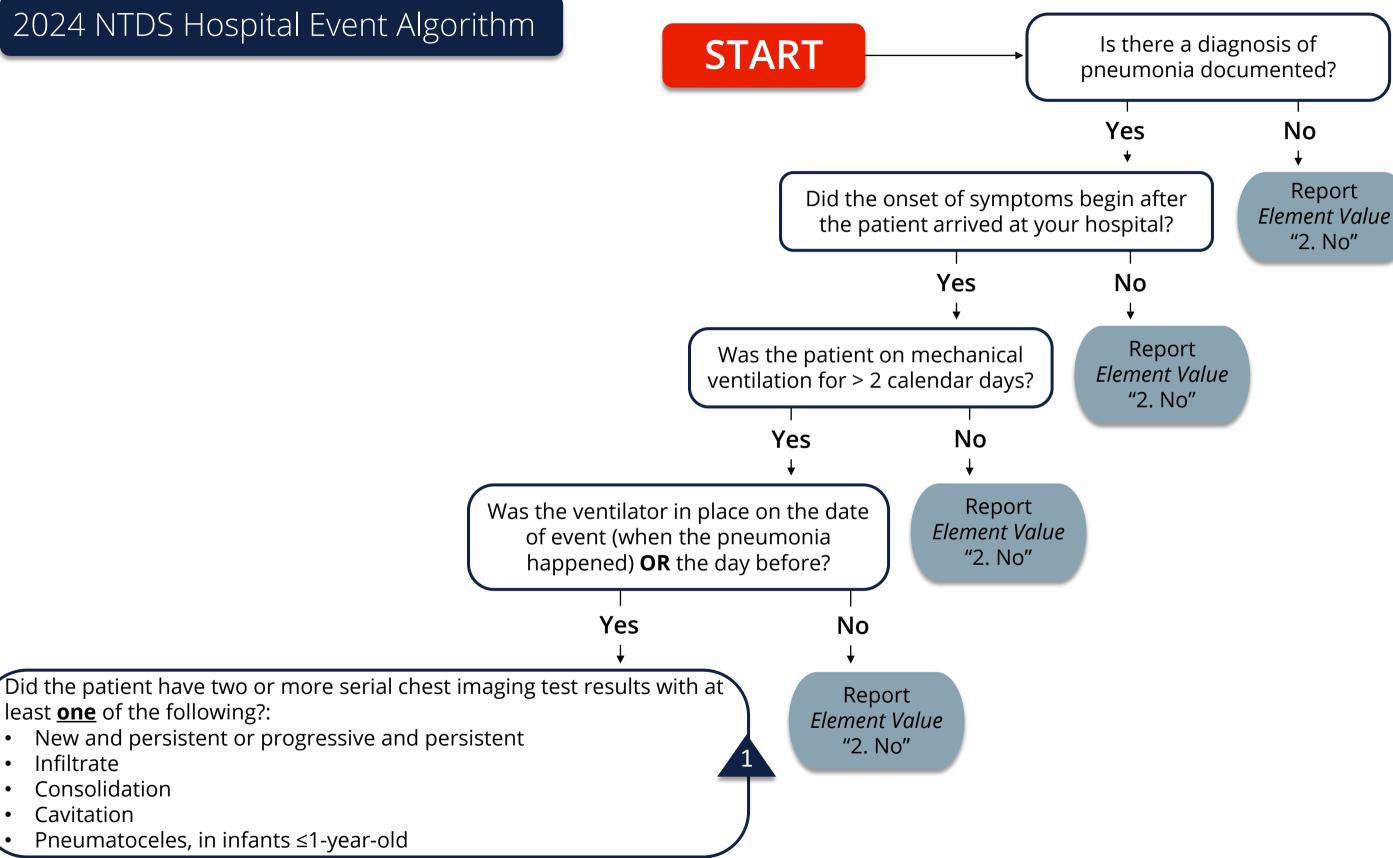
Yes

Continue to page 2

Infiltrate

Consolidation

Cavitation





Report

"2. No"

NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



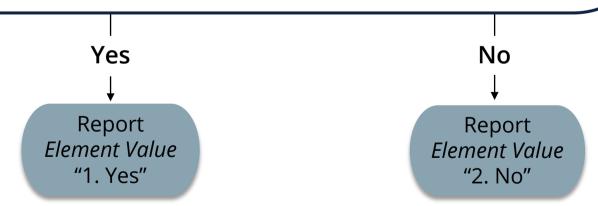
Ventilator-Associated Pneumonia (VAP) PNU2 Bacterial of Filamentous Fungal Pathogens (pg. 2 of 2)

2024 NTDS Hospital Event Algorithm

Did the patient have at least one of the following Yes "Signs/Symptoms"? • Fever (>38°C or >100.4°F) • Leukopenia (<4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³) • For adults ≥70 years old, altered mental status with no other recognized cause Yes No Report Element Value **AND** at least **one** of the following: • New onset of purulent sputum or change in character of "2. No" sputum, or increased respiratory secretions, or increased suctioning requirements • New onset or worsening cough, or dyspnea, or tachypnea • Rales or bronchial breath sounds • Worsening gas exchange (for example: O2 desaturations [for example: PaO2/FiO2 <240], increased oxygen requirements, or increased ventilator demand) No Report Yes Element Value "2. No"

Did the patient have at least <u>one</u> of the following "Laboratory" findings?

- Organism identified from blood
- Organism identified from pleural fluid
- Positive quantitative culture or corresponding semi-quantitative culture result from minimally contaminated LRT specimen (specifically, BAL, protected specimen brushing or endotracheal aspirate)
- ≥5% BAL-obtained cells contain intracellular bacteria on direct microscopic exam (for example: Gram's stain)
- Positive quantitative culture or corresponding semi-quantitative culture result of lung tissue
- Histopathologic exam shows at least **one** of the following evidences of pneumonia:
 - Abscess formation or foci of consolidation with intense PMN accumulation in bronchioles and alveoli
 - Evidence of lung parenchyma invasion by fungal hyphae or pseudohyphae

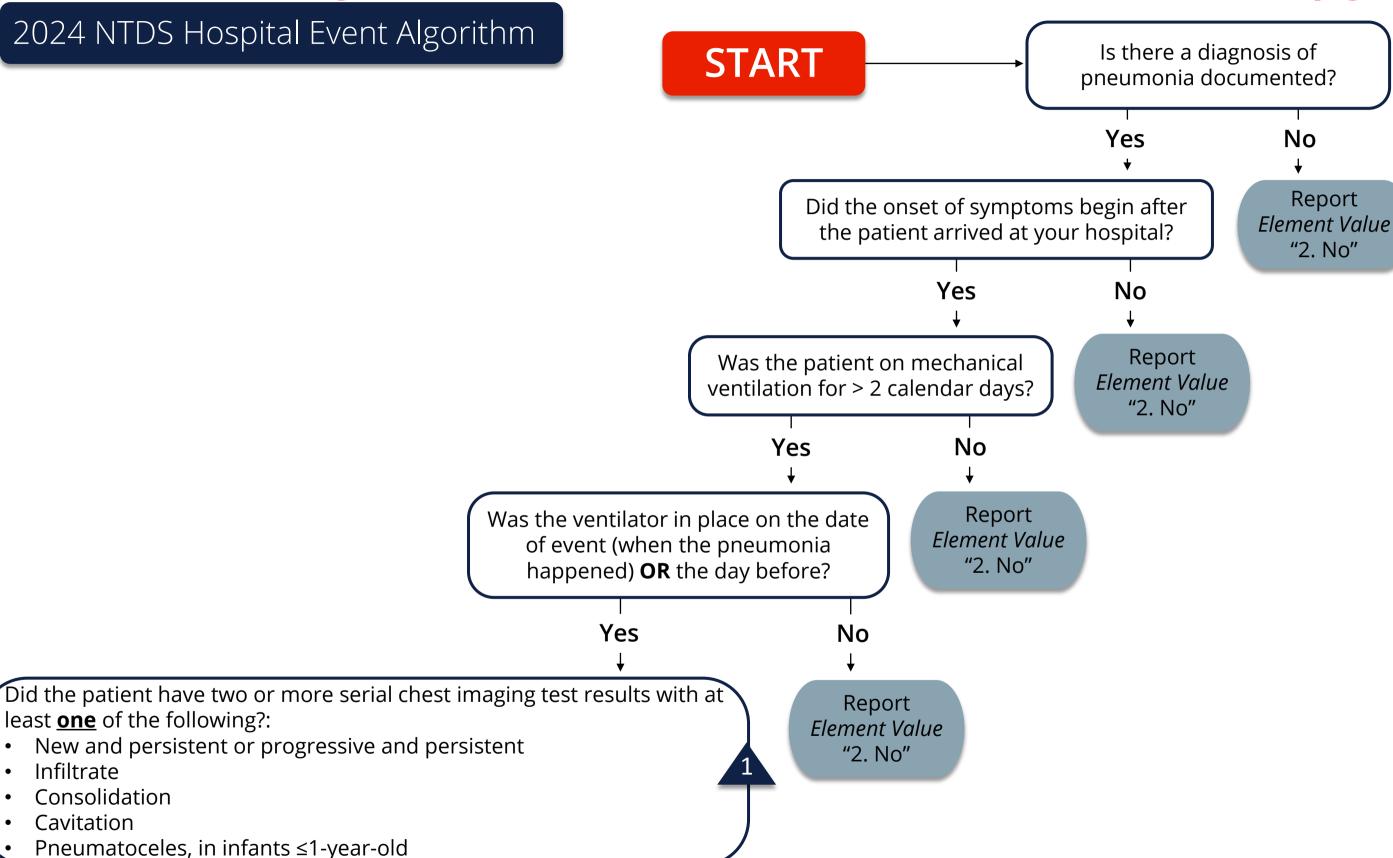


Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Ventilator-Associated Pneumonia (VAP) PNU2 Viral, Legionella, and other Bacterial Pneumonias (pg. 1 of 2)

2024 NTDS Hospital Event Algorithm



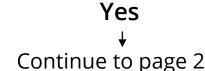


NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



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Pneumatoceles, in infants ≤1-year-old

least **one** of the following?:

Infiltrate

Consolidation

Cavitation

Ventilator-Associated Pneumonia (VAP) PNU2 Viral, Legionella, and other Bacterial Pneumonias (pg. 2 of 2)

2024 NTDS Hospital Event Algorithm

Did the patient have at least one of the following Yes "Signs/Symptoms"? • Fever (>38°C or >100.4°F) • Leukopenia (<4000 WBC/mm³) or leukocytosis (≥12,000 WBC/mm³) • For adults ≥70 years old, altered mental status with no other recognized cause Yes No Report Did the patient have at least **one** of the following? Element Value • New onset of purulent sputum or change in character of "2. No" sputum, or increased respiratory secretions, or increased suctioning requirements • New onset or worsening cough, or dyspnea, or tachypnea • Rales or bronchial breath sounds • Worsening gas exchange (for example: O2 desaturations [for example: PaO2/FiO2 <240], increased oxygen requirements, or increased ventilator demand) No Report Yes Element Value "2. No"

Did the patient have at least **one** of the following findings?

• Virus, Bordetella, Legionella, Chlamydia or Mycoplasma identified from respiratory secretions

OR

- Tissue by a culture or nonculture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example: not Active Surveillance Culture/ Testing (ASC/AST)
- Fourfold rise in paired sera (IgG) for pathogen (e.g., influenza viruses, *Chlamydia*)
- Fourfold rise in *Legionella pneumophila* serogroup 1 antibody titer to ≥1:128 in paired acute

AND

- Convalescent sera by indirect IFA
- Detection of *L. pneumophila* serogroup 1 antigens in urine by RIA or EIA



Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Ventilator-Associated Pneumonia (VAP) PNU3 Immunocompromised Patients (pg. 1 of 2)

2024 NTDS Hospital Event Algorithm

least **one** of the following?:

Pneumatoceles, in infants ≤1-year-old

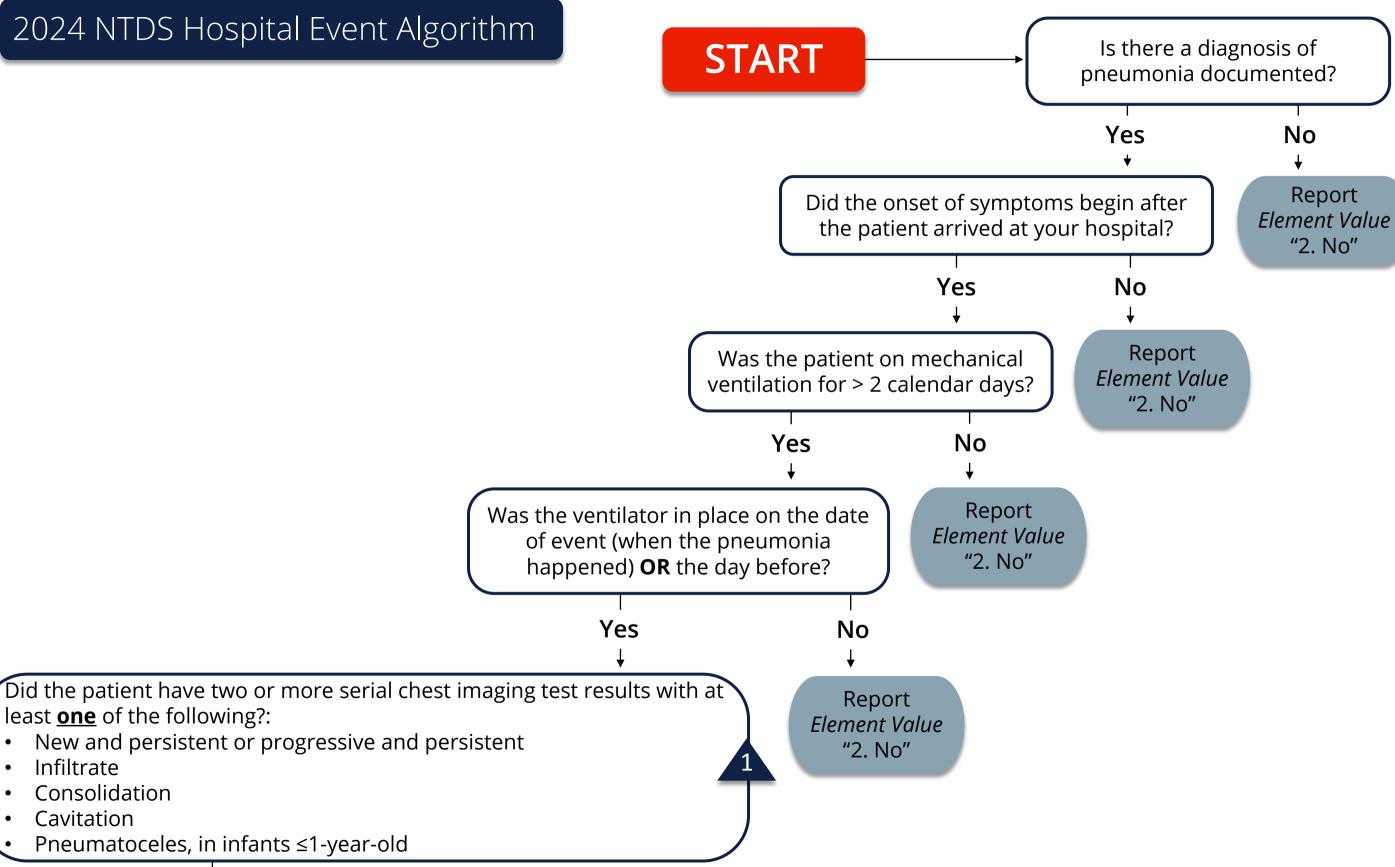
Yes

Continue to page 2

Infiltrate

Consolidation

Cavitation





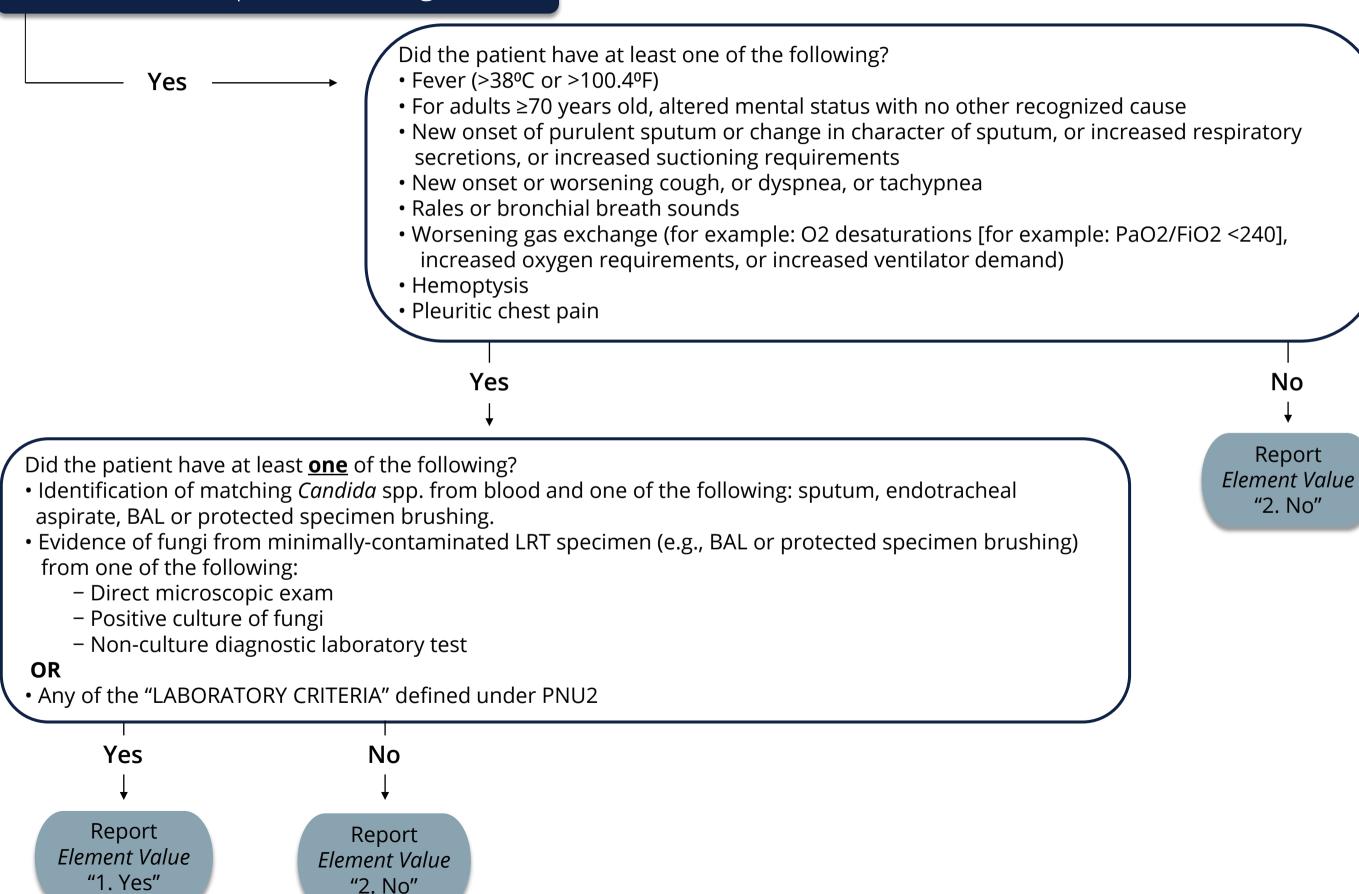
NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Ventilator-Associated Pneumonia (VAP) PNU3 Immunocompromised Patients (pg. 2 of 2)

2024 NTDS Hospital Event Algorithm



Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Ventilator-Associated Pneumonia (VAP) **ALTERNATE CRITERIA (PNU1), for infants ≤ 1-year-old (pg. 1 of 2)**

2024 NTDS Hospital Event Algorithm

least **one** of the following?:

Pneumatoceles, in infants ≤1-year-old

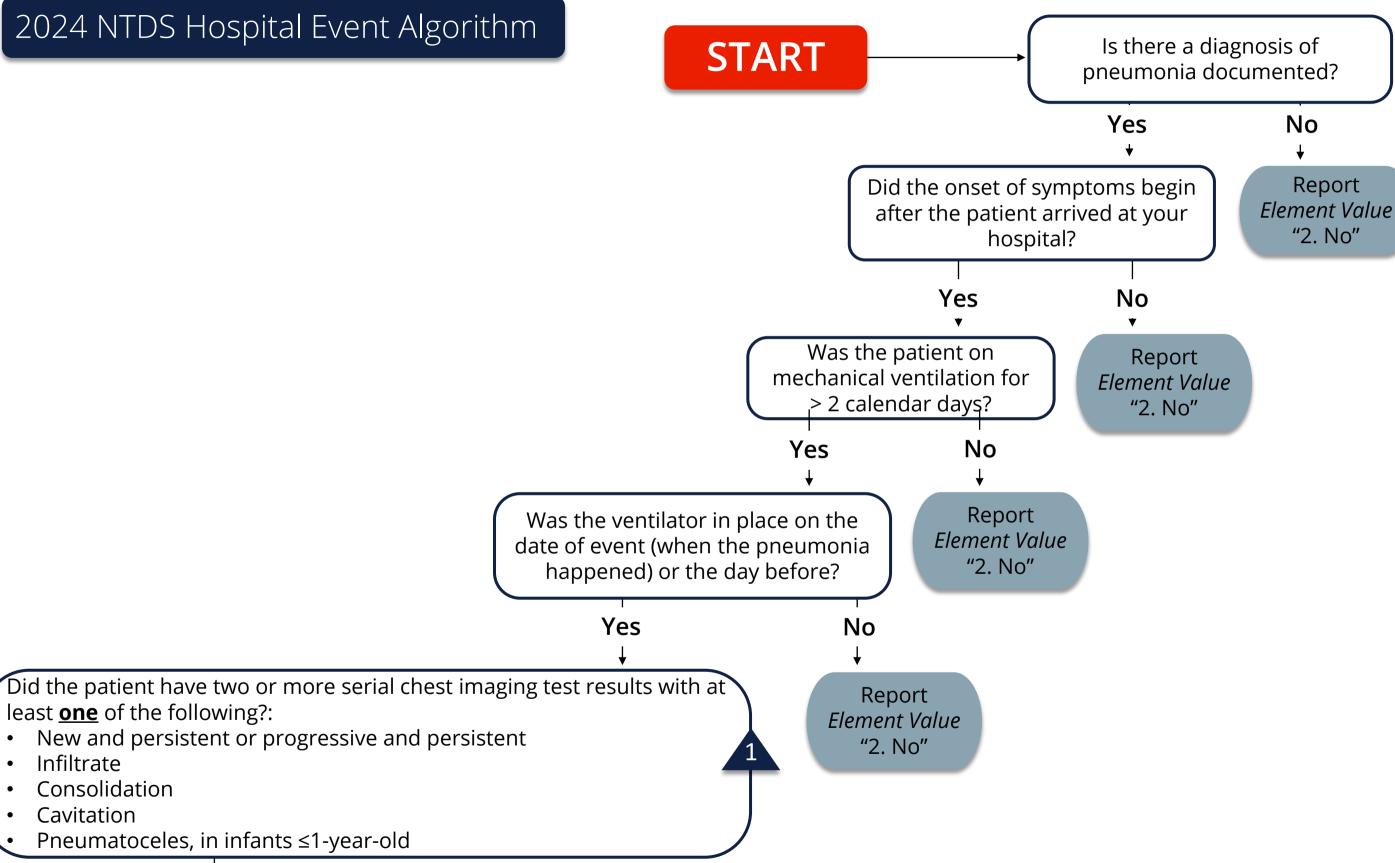
Yes

Continue to page 2

Infiltrate

Cavitation

Consolidation



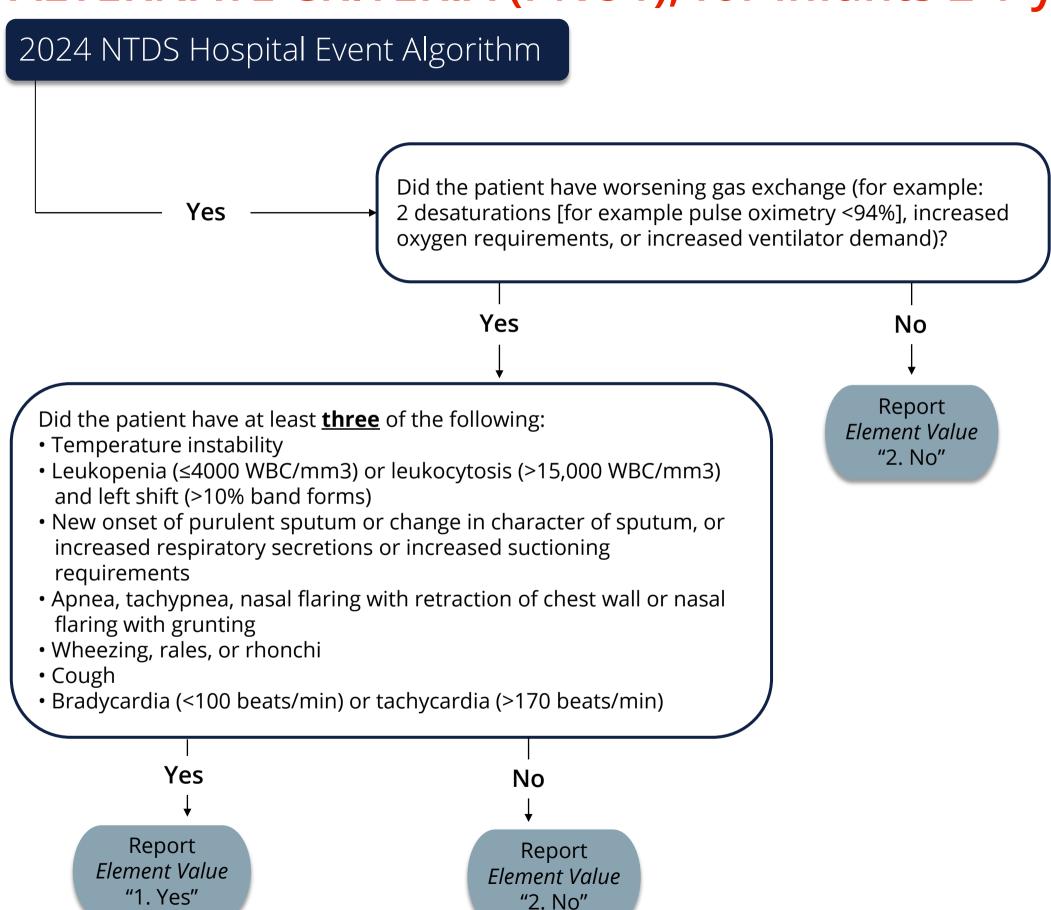


NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable

Consistent with the most recent version of the 2024 NTDS Data Dictionary Refer to complete NTDS definition for additional information



Ventilator-Associated Pneumonia (VAP) ALTERNATE CRITERIA (PNU1), for infants ≤ 1-year-old (pg. 2 of 2)

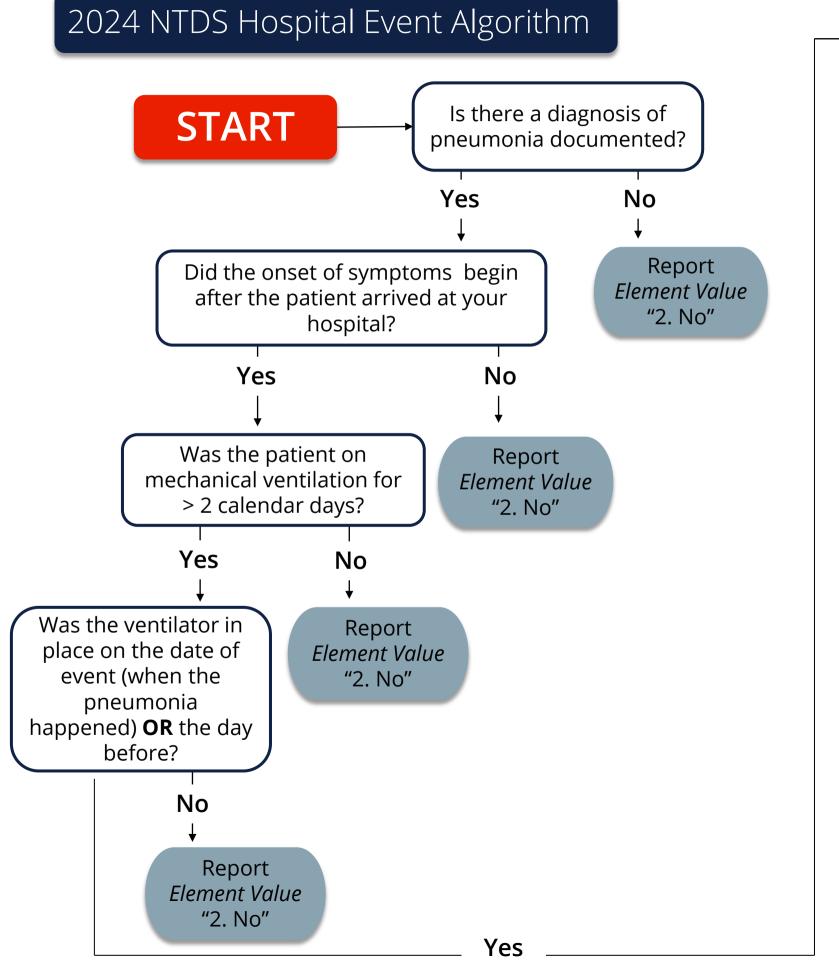


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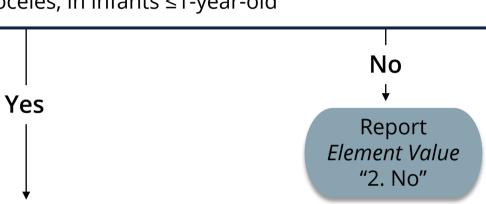
Ventilator-Associated Pneumonia (VAP) ALTERNATE CRITERIA (PNU1), for children

ALTERNATE CRITERIA (PNU1), for children > 1-year-old or ≤ 12-years-old



Did the patient have two or more serial chest imaging test results with at least **one** of the following?

- New and persistent or progressive and persistent
- Infiltrate
- Consolidation
- Cavitation
- Pneumatoceles, in infants ≤1-year-old





NOTE: In patients without underlying pulmonary or cardiac disease (for example: respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), one definitive chest imaging test result is acceptable.

ALTERNATE CRITERIA, for child >1 year old or ≤12 years old:

Did the patient have at least **three** of the following:

- Fever (>38. 0°C or >100. 4°F) or hypothermia (<36. 0°C or <96. 8°F)
- Leukopenia (≤4000 WBC/mm3) or leukocytosis (≥15,000 WBC/mm3)
- New onset of purulent sputum or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements
- New onset or worsening cough, or dyspnea, apnea, or tachypnea
- Rales or bronchial breath sounds
- Worsening gas exchange (for example: O2 desaturations [for example pulse oximetry <94%], increased oxygen requirements, or increased ventilator demand)



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