



# LIBRARY CONTENT SERIES: Starter Questions

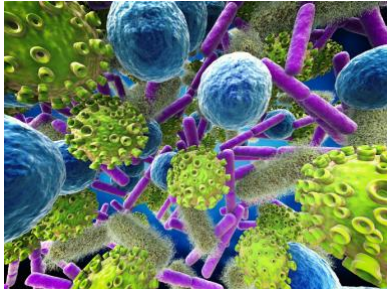

The purpose of these questions is to show examples of potential Qstream content and is created from publicly available information. The questions are available for Qstream clients to use as a “starter” and should be reviewed thoroughly to ensure the information is accurate and applicable prior to use.

## Use Case Topic: Sepsis


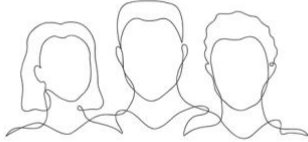
Date: April 2021  
Created by: Qstream

# Sepsis



Based on content from: <https://www.cdc.gov/sepsis/education/index.html>

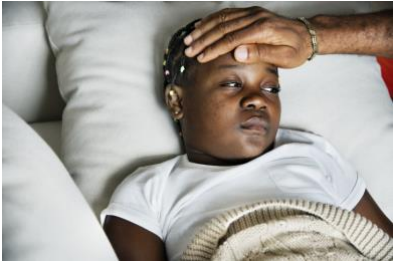

QUESTION 1	
Topic:	Core
Question Type:	Knowledge
Question Label for Reports: (35 character limit)	Definition
Question stem:	<b>Sepsis is the body's _____ to an infection.</b>
Images/Media:	
Answer Choice (A)	Partial response
Answer Choice (B)	Natural response
Answer Choice (C)	Extreme response
Answer Choice (D)	Intolerance
Answer Choice (E)	
Correct Answer:	<b>C</b>
Explanation:	<p>Sepsis is the body's extreme response to an infection and is a life-threatening emergency that can lead to other complications. It requires prompt medical attention. Sepsis can be caused by almost any infection, and most often start in the lung, urinary tract, skin, or gastrointestinal tract.</p> <p><b>Questions written for this Qstream are based on content from:</b> <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	



QUESTION 2	
Topic:	Core
Question Type:	Scenario
Question Label for Reports: (35 character limit)	How do you get sepsis
Question stem:	<p>Joseph's father Marco just received a diagnosis of sepsis at the local hospital during his treatment from a fall last week. While Joseph and his mother are at home, Joseph's mother expressed concern that they shouldn't visit Marco because they might contract sepsis from him.</p> <p><b>Joseph knows how people get sepsis and he should tell his mother which of the following?</b></p>
Images/Media:	
Answer Choice (A)	They need to take extra precautions when they visit Marco because most sepsis cases are caused by bacterial infections and sepsis can easily be transmitted to others.
Answer Choice (B)	They should not visit Marcos until his sepsis has been successfully treated because most sepsis cases are caused by bacterial infections and sepsis can easily be transmitted to others.
Answer Choice (C)	They don't need to take extra precautions when they visit Marco because some sepsis cases are caused by viral infections (such as influenza) and sepsis is rarely transmitted to others.
Answer Choice (D)	They need to take extra precautions when they visit because although Marco can't spread sepsis to other people, the infection that caused it can be spread.
Answer Choice (E)	
Correct Answer:	<b>D</b>
Explanation:	<p>Sepsis happens when an infection you already have (typically bacterial or viral) triggers a chain reaction throughout your body. You can't spread sepsis to other people. However, the infection that caused the sepsis can spread to other people. In this case, although Joseph and his mother can visit Marco, everyone who visits him needs to protect themselves from the infection Marco has, not his sepsis.</p> <p><b>Questions written for this Qstream are based on content from:</b>  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

QUESTION 3	
Topic:	Core
Question Type:	Scenario
Question Label for Reports: (35 character limit)	Sepsis rates
Question stem:	<p>Caleb is listening to an interview on the radio with a doctor who is talking about what happens to some people when they go to the hospital. Before the commercial break, the doctor says that an alarming number of people get a severe response to the infection that originally brought them into the hospital.</p> <p><b>After the break, the doctor elaborates that every year, _____ adults in the United States develop sepsis.</b></p>
Images/Media:	
Answer Choice (A)	1,700
Answer Choice (B)	17,000
Answer Choice (C)	170,000
Answer Choice (D)	1,700,000
Answer Choice (E)	17,000,000
Correct Answer:	<b>D</b>
Explanation:	<p>The doctor on the radio show shares that according to the Center for Disease Control (CDC), each year, at least 1.7 million people develop sepsis, and out of that number, over 270,000 die as a result of sepsis. One out of every three people who die in a hospital has sepsis.</p> <p><b>Questions written for this Qstream are based on content from:</b>  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

QUESTION 4	
Topic:	Reducing risks
Question Type:	Knowledge
Question Label for Reports: (35 character limit)	Risk factors
Question stem:	<b>Which of the following people are at a higher risk of getting an infection that can lead to sepsis?</b>
Images/Media:	
Answer Choice (A)	Children younger than 1
Answer Choice (B)	Adults 35 or older
Answer Choice (C)	Those with weakened immune systems
Answer Choice (D)	Those with chronic medical conditions (such as diabetes)
Answer Choice (E)	
Correct Answer:	<b>A, C, D</b>
Explanation:	<p>People who are older than 65 and younger than one are at higher risk because their immune system is either not fully developed (in young children) or might be deteriorating due to old age. Also, people are at greater risk if they have weakened immune systems, previously had sepsis, and/or have chronic medical conditions such as diabetes, kidney disease, lung disease, or cancer.</p> <p>Questions written for this Qstream are based on content from:  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

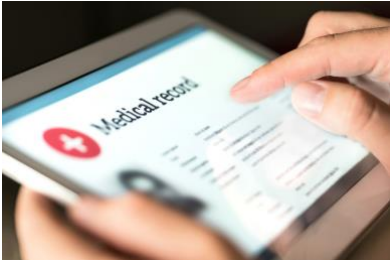

QUESTION 5	
Topic:	Reducing risks
Question Type:	Scenario
Question Label for Reports: (35 character limit)	Reducing risks
Question stem:	<p>During her annual medical checkup, Julia listens to some advice from Dr. Bailey, her primary care provider. Dr. Bailey explains that since Julia is now 65, she needs to take extra precautions to ensure that any future infections don't turn into more serious complications, such as sepsis.</p> <p><b>Julia's doctor makes which of the following recommendations?</b></p>
Images/Media:	
Answer Choice (A)	Prevent infections by taking good care of her diabetes
Answer Choice (B)	Take all recommended vaccines
Answer Choice (C)	Wear latex gloves when going outside
Answer Choice (D)	Keep any cuts clean and covered until healed
Answer Choice (E)	
Correct Answer:	<b>A, B, D</b>
Explanation:	<p>Dr. Bailey is following guidance of the Center for Disease Control (CDC) by recommending to Julia that she:</p> <ul style="list-style-type: none"> <li>• Prevent infections by taking good care of her diabetes</li> <li>• Take all recommended vaccines</li> <li>• Practice good hygiene by regularly washing her hands (taking the extra precaution of wearing latex gloves when going outside is not needed)</li> <li>• Keep any cuts clean and covered until healed</li> </ul> <p><b>Questions written for this Qstream are based on content from:</b>  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	



QUESTION 6	
Topic:	Reducing risks
Question Type:	Scenario
Question Label for Reports: (35 character limit)	What to do
Question stem:	<p>Jordan is looking at a scrape on his 7-year-old daughter's elbow. She scraped it three days ago and, despite his best efforts to keep it clean and bandaged, it keeps getting dirty and damp. His daughter now has new symptoms: she is shivering and disoriented.</p> <p><b>Jordan is very concerned and should:</b></p>
Images/Media:	
Answer Choice (A)	Continue monitoring his daughter for another 12 hours
Answer Choice (B)	Seek immediate in-person medical care
Answer Choice (C)	Seek medical care immediately via telehealth services
Answer Choice (D)	Start treatment for sepsis immediately, then call 911
Answer Choice (E)	
Correct Answer:	<b>B, C</b>
Explanation:	<p>Jordan's daughter's worsening condition with symptoms of shivering and disorientation are signs of sepsis. Jordan must act fast and get medical care immediately for his daughter either in-person or through telehealth services.</p> <p>Jordan can ask his healthcare professional if his daughter's infection could be leading to sepsis and if he should take her to the Emergency Department (ED) for a medical assessment.</p> <p><b>Questions written for this Qstream are based on content from:</b>  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

QUESTION 7	
Topic:	Reducing Risks
Question Type:	Knowledge
Question Label for Reports: (35 character limit)	Sepsis Symptoms
Question stem:	<b>Which of the following are signs and symptoms of sepsis?</b>
Images/Media:	
Answer Choice (A)	High heart rate
Answer Choice (B)	Fever or shivering
Answer Choice (C)	Confusion or disorientation
Answer Choice (D)	Dry, flaky skin
Answer Choice (E)	
Correct Answer:	<b>A, B, C</b>
Explanation:	<p>Although a medical assessment is needed to confirm a sepsis diagnosis, sepsis may present itself through one or more of the following symptoms:</p> <ul style="list-style-type: none"> <li>• High heart rate or low blood pressure</li> <li>• Fever or shivering</li> <li>• Confusion or disorientation</li> <li>• Shortness of breath</li> <li>• Extreme pain or discomfort</li> <li>• Clammy or sweaty skin</li> </ul> <p>Questions written for this Qstream are based on content from:  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	



QUESTION 8	
Topic:	Clinical
Question Type:	Knowledge
Question Label for Reports: (35 character limit)	Sepsis test
Question stem:	<b>A sepsis diagnosis requires clinical judgment based on evidence of infection and organ dysfunction because _____.</b>
Images/Media:	
Answer Choice (A)	There is no confirmatory diagnostic test
Answer Choice (B)	There are multiple diagnostic tests that can be used which often provide inconsistent results
Answer Choice (C)	The diagnostic tests that can be used often take over 72 hours to provide results
Answer Choice (D)	The diagnostic tests are exceedingly complicated and expensive
Answer Choice (E)	
Correct Answer:	<b>A</b>
Explanation:	<p>According to the U.S. Department of Health and Human Services (HHS), "Because there is no confirmatory diagnostic test, the diagnosis of sepsis requires clinical judgment based on evidence of infection and organ dysfunction." Since 1991, when the clinical definition of sepsis was first established, it has been revised twice and is now referred to as Sepsis-3. It is defined as a life-threatening organ dysfunction caused by a dysregulated host response to infection.</p> <p><b>Learn More</b>  <b>Sepsis Surveillance Toolkit</b> (32-page PDF)  Read all of the details in this comprehensive toolkit from the Center for Disease Control (CDC).  <a href="https://www.cdc.gov/sepsis/pdfs/Sepsis-Surveillance-Toolkit-Aug-2018_508.pdf">https://www.cdc.gov/sepsis/pdfs/Sepsis-Surveillance-Toolkit-Aug-2018_508.pdf</a></p> <p><b>Questions written for this Qstream are based on content from:</b>  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

QUESTION 9	
Topic:	Clinical
Question Type:	Scenario
Question Label for Reports: (35 character limit)	ASE Sepsis events
Question stem:	<p>A clinical administrative team has assigned Nurse Henry to validate how many patients in their hospital have been accurately diagnosed with sepsis over the last 24 months.</p> <p><b>To do so, Nurse Henry will perform Adult Sepsis Event (ASE) surveillance, which requires him to access which of the following types of records?</b></p>
Images/Media:	
Answer Choice (A)	Microbiology
Answer Choice (B)	Medication administration
Answer Choice (C)	Financial
Answer Choice (D)	Administrative coding data
Answer Choice (E)	
Correct Answer:	<b>A, B, D</b>
Explanation:	<p>There are multiple sepsis event definitions Nurse Henry could use. The clinical team has decided to use the Adult Sepsis Event (ASE) definition because it captures the widest variety of sepsis patients. Nurse Henry will need to view multiple records of provider-initiated interventions such as ordering blood cultures, antimicrobials, laboratory tests, vasopressors, as well as medication administration and administrative coding data.</p> <p><b>Questions written for this Qstream are based on content from:</b>  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

QUESTION 10	
Topic:	Clinical
Question Type:	Scenario
Question Label for Reports: (35 character limit)	BSE vs ASE
Question stem:	<p>Three clinicians are discussing how they should obtain data on sepsis rates within the seven hospitals within their network.</p> <p><b>Since the clinicians want to use a definition that measures with a high degree of accuracy, they decide to use:</b></p>
Images/Media:	
Answer Choice (A)	Adult Sepsis Event (ASE)
Answer Choice (B)	Bacteremia/Fungemia Shock Event (BSE)
Answer Choice (C)	Community Onset Event (COE)
Answer Choice (D)	Sequential Organ Failure Assessment (SOFA)
Answer Choice (E)	
Correct Answer:	<b>B</b>
Explanation:	<p>The three clinicians should use Bacteremia/Fungemia Shock Event (BSE) as their measure. It is a simplified definition that tracks a narrower sub-population of patients with much higher mortality. This sepsis definition is based on positive blood cultures (which almost always reflect true infections) and vasopressors (which almost always reflect clinically important hypotension).</p> <p>BSE can be determined using only microbiology and medication administration records. Further, BSE has shown to have a positive predictive value of 100% when using Sepsis-3 criteria as the reference standard.</p> <p><b>Questions written for this Qstream are based on content from:</b>  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

QUESTION 11	
Topic:	Clinical
Question Type:	Scenario
Question Label for Reports: (35 character limit)	Blood Culture
Question stem:	<p>Chris and Maria are reviewing blood cultures of all the patients in their department over the past six months to determine sepsis rates.</p> <p><b>Maria advises Chris that they need to include which of the following cultures in their review?</b></p>
Images/Media:	
Answer Choice (A)	Bacterial (aerobic and/or anaerobic)
Answer Choice (B)	Acid-fast bacilli (AFB)
Answer Choice (C)	Fungal
Answer Choice (D)	Specific viruses (e.g., cytomegalovirus)
Answer Choice (E)	
Correct Answer:	<b>A, B, C</b>
Explanation:	<p>When determining the prevalence of sepsis, Chris and Maria only need to use qualifying blood cultures including bacterial (aerobic and/or anaerobic), acid-fast bacilli (AFB), and fungal cultures. Blood cultures for specific viruses (e.g., cytomegalovirus) should be excluded.</p> <p>For ASE (Adult Sepsis Event), blood cultures need to have been drawn, regardless of the result to be included. For BSE (Bacteremia/Fungemia Shock Event), blood cultures or other bacteremia or fungemia testing of blood must have yielded a recognized pathogen to be included in their analysis.</p> <p><b>Questions written for this Qstream are based on content from:</b>  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

## QUESTION 12

Topic: Clinical

Question Type: Knowledge

Question Label for Reports: (35 character limit)  
Window period

Question stem:

The date the blood culture is obtained is the center of a window period extending \_\_\_\_ day(s) before and after the blood culture.

Images/Media:



Answer Choice (A) one

Answer Choice (B) two

Answer Choice (C) three

Answer Choice (D) four

Answer Choice (E)

Correct Answer: **B**

Explanation:



For both ASE (Adult Sepsis Event) and BSE (Bacteremia/Fungemia Shock Event), a window period is calculated by determining the time two days before and two days after a blood culture is drawn. Also, there may be instances where there are multiple window periods during a patient's hospitalization. They may even overlap if multiple blood cultures are obtained in a short period.

Questions written for this Qstream are based on content from:

<https://www.cdc.gov/sepsis/education/index.html>

Images/Media:



QUESTION 13	
Topic:	Clinical
Question Type:	Knowledge
Question Label for Reports: (35 character limit)	QAD
Question stem:	<b>To meet the criteria for a presumed infection, a Qualifying Antimicrobial Day (QAD) is calculated by the ____ day in the window period extending two days before and two days after the patient receives a new antimicrobial.</b>
Images/Media:	
Answer Choice (A)	first
Answer Choice (B)	second
Answer Choice (C)	third
Answer Choice (D)	last
Answer Choice (E)	
Correct Answer:	<b>D</b>
Explanation:	<p>For ASE (Adult Sepsis Event) events, the first QAD (Qualifying Antimicrobial Day) is the first day in the window period extending two days before and two days after the patient receives a new antimicrobial. A new antimicrobial is defined as an antimicrobial not previously administered in the prior two calendar days. Oral and intravenous formulations of the same antimicrobial are counted as the same antimicrobial EXCEPT for vancomycin.</p> <p>Questions written for this Qstream are based on content from:  <a href="https://www.cdc.gov/sepsis/education/index.html">https://www.cdc.gov/sepsis/education/index.html</a></p>
Images/Media:	

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