

Sepsis –NLaG update

IF YOU'RE FEVERISH
AND FEELING REALLY UNWELL

NHS

JUST ASK "COULD IT BE SEPSIS?"

IT'S A SIMPLE QUESTION,
BUT IT COULD SAVE LIVES.

Sepsis is a potentially life-threatening condition,
often triggered by infection.

It's hard to spot, but it kills 44,000 people a year in the UK.
It's easy to treat if caught early.

Donate now at www.sepsistrust.org/donate



The UK Sepsis Trust registered charity number 294944 & 10545780. Company registration number 04789971. Health Foundation charity number 1000010.



Suspect
SEPSIS



Save Lives

Facts

- Uk mortality rate for patients admitted with sepsis is 30%- 5 times higher than ST elevation, MI, stroke.
- Sepsis is a life-threatening condition arising when the body's abnormal, or 'dysregulated', immune response to an infection causes organs to begin to fail. Sepsis can be triggered by any infection, but most commonly occurs in response to bacterial infections of the lungs, urinary tract, abdominal organs or skin and soft tissues.
- Approximately 44,000 deaths in the UK – 150,000 admissions
- Sepsis is time critical . In severe cases / septic shock for every hour antibiotic administration delayed 8% mortality increase.
- Sepsis is still poorly recognised and 80% of infection given rise to sepsis originated in the community . Whilst not every patient with Community acquired infection went on to developed sepsis in the community , 54% of patients with hospital discharge diagnosis of sepsis had sepsis on arrival to hospital

New Definitions

- **INFECTION** – a pathological process caused by invasion of a normally sterile tissue or body cavity by pathogenic or potentially pathogenic micro organisms
- **SEPSIS** – is life threatening organ dysfunction caused by a dysregulated host response to infection
- **SEPTIC SHOCK** – is a sub-set of sepsis in which underlying circulatory and cellular metabolic abnormalities are profound enough to substantially increase mortality
- **SIRS criteria is OUT**
- **RED Flag (high risk)**
- **Amber Flag (moderate risk) . Are IN**

Who's at Risk ??

- Patients who are pregnant or who have recently been pregnant (including where the pregnancy did not result in delivery of a live baby) approximately 50% higher risk than non-pregnant individuals of similar age.
- Immunocompromised patients – ie chemotherapy patients, diabetics, patients who have had a splenectomy, sickle cell disease, taking long-term steroids or people taking immunosuppressant drugs to treat non-malignant disorders such as rheumatoid arthritis.
- Children particularly under 1.
- The elderly, defined by NICE as age over 75 years or patients over 65 years with complex illness or frailty.
- Recent trauma, invasive procedure or surgery (within the last six weeks).
- Patients with indwelling devices or known breach of skin integrity.
- Intravenous drug abusers.

Signs & Symptoms

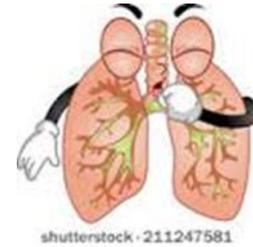
- The symptoms of sepsis may develop as a response to a localised infection or injury. In some cases, symptoms may develop when you are already in hospital, for example if you have recently had surgery.
- The symptoms of sepsis usually develop quickly and can include:
 - Extreme shivering and muscle pain.
 - Passing no urine (in 18 hours).
 - Low blood pressure which may result in feeling dizzy on standing.
 - A change in mental alertness such as confusion or disorientation.
 - Diarrhoea.
 - Cold, clammy and/or mottled / pale skin.
 - “I know something is badly wrong with me”.



An infographic with a red background. On the left, the text reads: 'SEPSIS IN ADULTS IS A SERIOUS CONDITION' in large, bold, white letters. Below this, in smaller white text: 'that can initially look like flu, gastroenteritis or a chest infection. Sepsis affects more than 250,000 people every year in the UK.' At the bottom left, in very small white text: 'The UK Sepsis Trust registered charity number (England & Wales) 115084'. On the right side, there is a vertical list of symptoms under the heading 'Seek medical help urgently if you develop any or one of the following:'. The symptoms are: 'S lurred speech or confusion', 'E xtreme shivering or muscle pain', 'P assing no urine (in a day)', 'S evere breathlessness', 'I t feels like you're going to die', and 'S kin mottled or discoloured'. At the bottom right, in large, bold, white letters: 'JUST ASK' followed by '“COULD IT BE SEPSIS?”' in a smaller font. Below that, in even smaller white text: 'IT'S A SIMPLE QUESTION, BUT IT COULD SAVE A LIFE.'

Potential sources

- Types of infection associated with sepsis are:
- Lung infections (pneumonia).
- Infection of the lining of the digestive system (peritonitis / appendicitis).
- An infection of the bladder, urethra, or kidneys (urinary tract infections).
- Post-surgical (after surgery) infections.
- Infections of the nervous system such as meningitis or encephalitis.
- Skin / tissue infection such as an abscess.



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OBTAIN SAMPLES

- Cannot emphasise enough the importance of obtaining samples from where the potential source could be , or diagnostics ie ultra sounds xrays etc .
- Required for the 72hrs antibiotic review .

Sepsis 6

- The SEPSIS Six was developed by founders of the UK Sepsis Trust in 2005 as an operational solution to a set of complex yet robust guidelines developed by the International Surviving SEPSIS Campaign. It has since spread to use in more than 30 countries.

- **1.GIVE O2 TO KEEP SATS ABOVE 94%**
- **2.TAKE BLOOD CULTURES**
- **3.GIVE IV ANTIBIOTICS**
- **4.GIVE A FLUID CHALLENGE**
- **5.MEASURE LACTATE**
- **6.MEASURE URINE OUTPUT**



- No Red flags send bloods , Dr review & treatment within 3hrs



What's happening trust wide ?

- CQUIN - sepsis till March 2019 a/ screening b/ antibiotics within the hour c) 72hrs antibiotic review .
- Screening tools to be completed on all patients meeting criteria NEWS score >5 or 1 single parameter equals 3 .
- Training within the community all carry screening tools to aid them .
- Process of electronic version , trialling various areas .
- Screening from the hand held devices .
- E-learning package mandatory on the matrix . Paediatrics will be on it's way .
- EMAS – antibiotics in the home before transfer to A&E

The image shows two versions of the 'ADULT Sepsis Screening & Action Tool' form. The left version is a printed form with red highlights on sections 1, 2, and 3. The right version is a digital form with a yellow background and red highlights on the same sections. Both forms include patient information, vital signs, and clinical observations, leading to a NEWS score and a risk assessment for sepsis.

This is a detailed screenshot of the 'Prehospital Adult Sepsis Indication Tool for M&U Community & Therapy Services Group'. It is a flowchart-style form with multiple decision points and action steps. The form is divided into several sections, each with a decision point and corresponding actions. The sections include:

- 1. Is ONE or more vital signs present?** (Yes/No)
- 2. Is the patient responsive to stimuli?** (Yes/No)
- 3. Is any ONE of the following present?** (Yes/No)
- 4. Is any ONE of the following present?** (Yes/No)
- 5. Is any ONE of the following present?** (Yes/No)
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- 49. Is any ONE of the following present?** (Yes/No)
- 50. Is any ONE of the following present?** (Yes/No)



EMAS



- Started pilot in May 16 for 6 months – 10 paramedic crews (SGH/DPOW each site)
- In addition to fluids, oxygen & cannulation, take blood cultures and give 1g meropenem for all red flag sepsis .
- Results showed:- mean time from call to needle 45mins paramedics compared with 1hrs 53mins A&E .
- Roll out Sept 2017 training all paramedics to deliver this care to all patients with in EMAS patch .



Together 
we care, we respect, we deliver

Summary

- Recognize sepsis and septic shock asap
- Suspect in anyone with an infection
- Suspect in anyone with a EWS >5 or 1 red flag
- Suspect in anyone that you have a concern about
- Ensure international consensus definition used when documenting in notes 'Sepsis' – life threatening organ dysfunction caused by a dysregulated host response to infection.
- Pull together clinical story, observations and blood results
- Use NLaG screening tool to help
- Involve medical team early with "suspicion of sepsis"
- Look for high risk factors to suspect sepsis & septic shock
- Use the SEPSIS 6 to guide initial treatment
- Ensure antibiotic review within first 72hrs