

## Changes made to NICE's guideline on sepsis (NG51) Draft for consultation, March 2023

## Recommendations included in the draft for consultation

Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
-	1.1 Identifying people with suspected sepsis	-	-	-	-
1.1.1	Think 'could this be sepsis?' if a person presents with signs or symptoms that indicate possible infection.	refreshed	The 2023 committee says symptoms should come before signs	1.1.1	Think 'could this be sepsis?' if a person presents with symptoms or signs that indicate possible infection.
1.1.2	Take into account that people with sepsis may have non-specific, non-localised presentations, for example feeling very unwell, and may not have a high temperature.	none	-	1.1.2	-
1.1.3	Pay particular attention to concerns expressed by the person and their family or carers, for	none	-	1.1.3	-

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	example changes from usual behaviour.				
1.1.4	Assess people who might have sepsis with extra care if they cannot give a good history (for example, people with English as a second language or people with communication problems).	none	-	1.1.4	-
1.1.5	Assess people with any suspected infection to identify:  • possible source of infection  • factors that increase risk of sepsis (see section 1.2 on risk factors for sepsis)  • any indications of clinical concern, such as new onset abnormalities of behaviour, circulation or respiration.	refreshed - added link to relevant section in bullet 1	for clarity	1.1.5	Assess people with any suspected infection to identify:  • possible source of infection (see the recommendations on finding the source of infection)  • factors that increase risk of sepsis (see people who are most vulnerable to sepsis)  • any indications of clinical concern, such as new-onset abnormalities of behaviour, circulation or respiration.
1.1.6	Identify factors that increase risk of sepsis (see section 1.2 on risk factors for sepsis) or indications of clinical concern such as new onset abnormalities of behaviour, circulation or respiration when deciding during a remote assessment whether to offer a face-to-face-assessment and if so, on	refreshed	Making it clearer when this applies	1.1.6	During a remote assessment, when deciding whether to offer a face-to-face-assessment and, if so, on the urgency of it, identify:  • factors that increase risk of sepsis (see people who are most vulnerable to sepsis) and  • indications of clinical concern such as

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	the urgency of face-to-face assessment.				new onset abnormalities of behaviour, circulation or respiration.
1.1.7	Use a structured set of observations (see section 1.3 on 1.3 face-to-face assessment on people with suspected sepsis) to assess people in a face-to-face setting to stratify risk (see section 1.4 on stratifying risk of severe illness or death from sepsis) if sepsis is suspected.	refreshed	The link text had to be updated due to changes in structure of the guideline	1.1.7	Use a structured set of observations to assess people in a face-to-face setting to stratify risk if sepsis is suspected. (See the recommendations on face to face assessment and evaluating risk in people with suspected sepsis for the relevant population group).
1.1.8	Consider using an early warning score (NEWS2 has been endorsed by NHS England) to assess people with suspected sepsis in acute hospital settings.	updated	Bringing the recommendation in line with the risk evaluation section	1.1.8	Use the national early warning score (NEWS2) to assess people aged 16 or over (who are not pregnant) with suspected sepsis who are in an acute hospital setting, acute mental health setting or ambulance.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.1.9	Suspect neutropenic sepsis in patients having anticancer treatment who become unwell. [This recommendation is from NICE's guideline on neutropenic sepsis.]	updated	Clarifying populations at risk of neutropenic sepsis	1.1.9	Suspect neutropenic sepsis in patients who  are having or have had systemic anticancer treatment within the last 30 days and who become unwell  are receiving or have received immunosuppressant treatment for reasons unrelated to cancer. Use clinical judgement (based on the person's specific condition, medical history, or both, and on the treatment they received) to determine whether any past treatment may still be likely to cause neutropenia. [This recommendation is adapted from NICE's guideline on neutropenic sepsis in people with cancer.]
1.1.10	Refer patients with suspected neutropenic sepsis immediately for assessment in secondary or tertiary care. [This recommendation is from NICE's guideline on neutropenic sepsis.]	none	-	1.1.10	-
1.1.11	Treat people with neutropenic sepsis in line with NICE's guideline on neutropenic sepsis.	added 'regardless of cause' and corrected title of NICE guideline	Aligning with changes made on recommendation 1.1.9	1.1.11	Treat people with neutropenic sepsis, regardless of cause, in line with NICE's guideline on neutropenic sepsis in people with cancer.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
		on neutropenic sepsis in people with cancer			
-	1.2 Risk factors for sepsis	-	-	-	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.2.1	Take into account that people in the groups below are at higher risk of developing sepsis:  • the very young (under 1 year) and older people (over 75 years) or people who are very frail  • people who have impaired immune systems because of illness or drugs, including:  - people being treated for cancer with chemotherapy (see recommendation 1.1.9 in the section on identifying people with suspected sepsis)  - people who have impaired immune function (for example, people with diabetes, people who have had a splenectomy, or people with sickle cell disease)  - people taking long-term steroids  - people taking immunosuppressant drugs to treat non-malignant disorders such as rheumatoid arthritis  • people who have had surgery, or other invasive procedures, in the past 6 weeks  • people with any breach of skin integrity (for example, cuts, burns, blisters or skin infections)	refreshed	Clarity and compliance with current NICE style	1.2.1	Take into account that people in the following groups are at higher risk of developing sepsis:  • the very young (under 1 year) and older people (over 75 years), or people who are very frail  • people who have impaired immune systems because of illness or drugs, including:  - people having treatment for cancer with chemotherapy (see recommendation 1.1.9 [was 1.1.9])  - people who have impaired immune function (for example, people with diabetes, people who have had a splenectomy, or people with sickle cell disease)  - people taking long-term steroids  - people taking immunosuppressant drugs to treat non-malignant disorders such as rheumatoid arthritis  • people who have had surgery, or other invasive procedures, in the past 6 weeks  • people with any breach of skin integrity (for example, cuts, burns, blisters or skin infections)  • people who misuse drugs intravenously  • people with indwelling lines or catheters.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	<ul> <li>people who misuse drugs intravenously</li> <li>people with indwelling lines or catheters.</li> </ul>				

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.2.2	Take into account that women who are pregnant, have given birth or had a termination of pregnancy or miscarriage in the past 6 weeks are in a high risk group for sepsis. In particular, women who:  • have impaired immune systems because of illness or drugs (see recommendation 1.1.5 in the section on identifying people with suspected sepsis)  • have gestational diabetes or diabetes or other comorbidities  • needed invasive procedures (for example, caesarean section, forceps delivery, removal of retained products of conception)  • had prolonged rupture of membranes  • have or have been in close contact with people with group A streptococcal infection, for example, scarlet fever  • have continued vaginal bleeding or an offensive vaginal discharge.	none		1.2.2	

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.2.3	Take into account the following risk factors for early-onset neonatal infection:  • invasive group B streptococcal infection in a previous baby  • maternal group B streptococcal colonisation, bacteriuria or infection in the current pregnancy  • prelabour rupture of membranes  • preterm birth following spontaneous labour (before 37 weeks' gestation)  • suspected or confirmed rupture of membranes for more than 18 hours in a preterm birth  • intrapartum fever higher than 38°C, or confirmed or suspected chorioamnionitis  • parenteral antibiotic treatment given to the woman for confirmed or suspected invasive bacterial infection (such as septicaemia) at any time during labour, or in the 24-hour periods before and after the birth (this does not refer to intrapartum antibiotic prophylaxis)  • suspected or confirmed infection in another baby in the case of a multiple pregnancy.	none		1.2.3	

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[This recommendation is from NICE's guideline on neonatal infection.]	Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
- 1.3 Face-to-face assessment of people	-	1.3 Face-to-face assessment of people	-	-	-	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.3.1	Assess temperature, heart rate, respiratory rate, blood pressure, level of consciousness and oxygen saturation in young people and adults with suspected sepsis.	none	-	1.3.1	-
1.3.6	Measure oxygen saturation in community settings if equipment is available and taking a measurement does not cause a delay in assessment or treatment.	refreshed - brought mention of community settings to start of sentence	Clarifying when this recommendation applies	1.3.2	
1.3.7	Examine people with suspected sepsis for mottled or ashen appearance, cyanosis of the skin, lips or tongue, non-blanching rash of the skin, any breach of skin integrity (for example, cuts, burns or skin infections) or other rash indicating potential infection.	none	-	1.3.3	-
1.3.8	Ask the person, parent or carer about frequency of urination in the past 18 hours.	refreshed	-	1.3.4	-
-	1.4 Stratifying risk of severe illness or death from sepsis	-	-	-	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.4.1	Use the person's history and physical examination results to grade risk of severe illness or death from sepsis using criteria based on age (see tables 1, 2 and 3).	amended and refreshed	- removing duplication between recommendations and tables - taking out the population and settings in which NEWS2 can be used and for which new recommendations have been written by the 2023 committee  For the population and settings in which NEWS2 can be used , this recommendation is replaced by new recommendations	1.4.1	For people aged 16 or over in the community and in custodial settings, grade risk of severe illness or death from sepsis using the person's  • history  • physical examination results and  • criteria based on age (for people aged 16 or over who are not and have not recently been pregnant, see table 1: criteria for stratification of risk from sepsis in people aged 16 or over who are in the community or in a custodial setting).

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	Table 1	Deleted 'low risk criteria' column	The content of the columns is never refered to in recommendations and the only criteria it contains is the absence of moderate to high risk and high risk criteria		

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.4.2	Recognise that adults, children and young people aged 12 years and over with suspected sepsis and any of the symptoms or signs below are at high risk of severe illness or death from sepsis:  • objective evidence of new altered mental state  • respiratory rate of 25 breaths per minute or above, or new need for 40% oxygen or more to maintain oxygen saturation more than 92% (or more than 88% in known chronic obstructive pulmonary disease)  • heart rate of more than 130 beats per minute  • systolic blood pressure of 90 mmHg or less, or systolic blood pressure more than 40 mmHg below normal  • not passed urine in previous 18 hours (for catheterised patients, passed less than 0.5 ml/kg/hour)  • mottled or ashen appearance  • cyanosis of the skin, lips or tongue  • non-blanching rash of the skin.	amended and refreshed, merged with 1.4.3	- removing duplication between recommendations and tables - taking out the population and settings in which NEWS2 can be used and for which new recommendations have been written by the 2023 committee  For the population and settings in which NEWS2 can be used , this recommendation is replaced by new recommendations	1.4.2	Recognise that people aged 16 years or over with suspected sepsis in the community and in custodial settings are at  • high risk of severe illness or death from sepsis if they meet any of the high risk criteria in table 1: criteria for stratification of risk from sepsis in people aged 16 or over who are in the community or in a custodial setting  • moderate to high risk of severe illness or death from sepsis meet any of the moderate to high risk criteria in table 1: criteria for stratification of risk from sepsis in people aged 16 or over who are in the community or in a custodial setting.
	Be aware that some pulse oximeters can underestimate or overestimate				

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	oxygen saturation levels, especially if the saturation level is borderline. Overestimation has been reported in people with dark skin. See also the NHS England Patient Safety Alert on the risk of harm from inappropriate placement of pulse oximeter probes.				

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.4.3	Recognise that adults, children and young people aged 12 years and over with suspected sepsis and any of the symptoms or signs below are at moderate to high risk of severe illness or death from sepsis:  • history of new-onset changed behaviour or change in mental state, as reported by the person, a friend or relative  • history of acute deterioration of functional ability  • impaired immune system (illness or drugs, including oral steroids)  • trauma, surgery or invasive procedure in the past 6 weeks  • respiratory rate of 21 to 24 breaths per minute  • heart rate of 91 to 130 beats per minute or new-onset arrhythmia, or if pregnant heart rate of 100 to 130 beats per minute  • systolic blood pressure of 91 to 100 mmHg  • not passed urine in the past 12 to 18 hours (for catheterised patients, passed 0.5 ml/kg/hour to 1 ml/kg/hour)	amended and refreshed, merged with 1.4.3	- removing duplication between recommendations and tables - taking out the population and settings in which NEWS2 can be used and for which new recommendations have been written by the 2023 committee  For the population and settings in which NEWS2 can be used , this recommendation is replaced by new recommendations	1.4.2	Recognise that people aged 16 years or over with suspected sepsis in the community and in custodial settings are at  • high risk of severe illness or death from sepsis if they meet any of the high risk criteria in table 1: criteria for stratification of risk from sepsis in people aged 16 or over who are in the community or in a custodial setting  • moderate to high risk of severe illness or death from sepsis meet any of the moderate to high risk criteria in table 1: criteria for stratification of risk from sepsis in people aged 16 or over who are in the community or in a custodial setting.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	tympanic temperature less than 36°C     signs of potential infection, including increased redness, swelling or discharge at a surgical site, or breakdown of a wound.				

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.4.4	Consider adults, children and young people aged 12 years and over with suspected sepsis who do not meet any high or moderate to high risk criteria to be at low risk of severe illness or death from sepsis.	amended and refreshed	- removing duplication between recommendations and tables - taking out the population and settings in which NEWS2 can be used and for which new recommendations have been written by the 2023 committee  For the population and settings in which NEWS2 can be used , this recommendation is replaced by new recommendations	1.4.3	If people aged 16 or over with suspected sepsis in the community and in custodial settings do not meet any high risk or moderate to high risk criteria, see them as being at low risk of severe illness or death from sepsis.
1.4.11	Do not use a person's temperature as the sole predictor of sepsis.	merged with 1.4.12	Avoiding repetition	1.3.7	Do not rely on fever or hypothermia alone to rule sepsis either in or out.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.4.12	Do not rely on fever or hypothermia to rule sepsis either in or out.	merged with 1.4.11	Avoiding repetition	1.3.7	Do not rely on fever or hypothermia alone to rule sepsis either in or out.
1.4.13	Ask the person with suspected sepsis and their family or carers about any recent fever or rigors.	none	sections containing recommendations 1.4.11 to 1.4.22 moved in agreement with committee, as part of restructuring the guideline	1.3.5	
1.4.14	Take into account that some groups of people with sepsis may not develop a raised temperature. These include:  • people who are older or very frail  • people having treatment for cancer  • people severely ill with sepsis  • young infants or children.	none	-	1.3.8	-
1.4.15	Take into account that a rise in temperature can be a physiological response, for example after surgery or trauma.	none	-	1.3.9	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.4.16	Interpret the heart rate of a person with suspected sepsis in context, taking into account that:  • baseline heart rate may be lower in young people and adults who are fit  • baseline heart rate in pregnancy is 10 to 15 beats per minute more than normal  • older people with an infection may not develop an increased heart rate  • older people may develop a new arrhythmia in response to infection rather than an increased heart rate  • heart rate response may be affected by medicines such as beta-blockers.	none	-	1.3.10	
1.4.17	Interpret blood pressure in the context of a person's previous blood pressure, if known. Be aware that the presence of normal blood pressure does not exclude sepsis in children and young people.	none	-	1.3.11	-
1.4.18	Interpret a person's mental state in the context of their normal function and treat changes as being significant.	none	-	1.3.12	-
1.4.19	Be aware that changes in cognitive function may be subtle and assessment should include history from patient and family or carers.	none	-	1.3.13	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.4.20	Take into account that changes in cognitive function may present as changes in behaviour or irritability in both children and in adults with dementia.	none	-	1.3.14	-
1.4.21	Take into account that changes in cognitive function in older people may present as acute changes in functional abilities.	none	-	1.3.15	-
1.4.22	Take into account that if peripheral oxygen saturation is difficult to measure in a person with suspected sepsis, this may indicate poor peripheral circulation because of shock.	none	-	1.3.16	-
-	Be aware that some pulse oximeters can underestimate or overestimate oxygen saturation levels, especially if the saturation level is borderline.  Overestimation has been reported in people with dark skin. See also the NHS England Patient Safety Alert on the risk of harm from inappropriate placement of pulse oximeter probes.	-	Not strictly from the 2016 guideline - this is a MHRA warning added in 2022 to all recommendations or sections mentioning oximeters	with all recommendations to which it is relevant	-
-	1.5 Managing suspected sepsis outside acute hospital settings	-	-	-	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.5.1	Refer all people with suspected sepsis outside acute hospital settings for emergency medical care by the most appropriate means of transport (usually 999 ambulance) if:  • they meet any high risk criteria (see tables 1, 2 and 3) or  • they are aged under 17 years and their immunity is impaired by drugs or illness and they have any moderate to high risk criteria.  Emergency care requires facilities for resuscitation to be available and depending on local services may be emergency department, medical admissions unit and for children may be paediatric ambulatory unit or paediatric medical admissions unit.	amended and refreshed	-Taking out the population and settings in which NEWS2 can be used and for which new recommendations have been written by the 2023 committee - Integrating former footnotes  For the population and settings in which NEWS2 can be used , this recommendation is replaced by new recommendations	1.6.1	Refer people aged 16 or over with suspected sepsis in the community and in custodial settings for emergency medical care if:  • they meet any high risk criteria (see table 1: criteria for stratification of risk from sepsis in people aged 16 or over who are not in an acute setting) or  • they are aged 16, their immunity is impaired by drugs or illness, and they meet any moderate to high risk criteria.  Use the most appropriate means of transport (usually 999 ambulance).  Emergency care requires facilities for resuscitation to be available and, depending on local services, may be emergency department, medical admissions unit and, for children, paediatric ambulatory unit or paediatric medical admissions unit.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.5.2	Assess all people with suspected sepsis outside acute hospital settings with any moderate to high risk criteria to:  • make a definitive diagnosis of their condition  • decide whether they can be treated safely outside hospital.  If a definitive diagnosis is not reached or the person cannot be treated safely outside an acute hospital setting, refer them urgently for emergency care.	amended and refreshed	-Taking out the population and settings in which NEWS2 can be used and for which new recommendations have been written by the 2023 committee - Integrating former footnotes  For the population and settings in which NEWS2 can be used , this recommendation is replaced by new recommendations	1.8.1	Assess people aged 16 or over with suspected sepsis in the community and in custodial settings who meet any moderate to high risk criteria to:  • make a definitive diagnosis of their condition  • decide whether their condition can be treated safely outside hospital.  If a definitive diagnosis is not reached or the person's condition cannot be treated safely outside an acute hospital setting, refer them urgently for emergency care.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.5.3	Provide people with suspected sepsis, who do not have any high or moderate to high risk criteria information about symptoms to monitor and how to access medical care if they are concerned.	amended and refreshed + reference to relevant section added	-Taking out the population and settings in which NEWS2 can be used and for which new recommendations have been written by the 2023 committee - Integrating former footnotes  For the population and settings in which NEWS2 can be used , this recommendation is replaced by new recommendations	1.8.2	Provide people aged 16 or over with suspected sepsis in the community and in custodial settings who do not meet any high risk or moderate to high risk criteria with information about:  • symptoms to monitor and  • how to access medical care if they are concerned.  Also see information at discharge for people assessed for suspected sepsis, but not diagnosed with sepsis.
-	1.6 Managing and treating suspected sepsis in acute hospital settings	-	-	-	-

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1.6.1	For adults, children and young people	amended	3rd bullet point	1.10.1	For people aged 16 or over with suspected
	aged 12 years and over who have	and	replaced by 2023		sepsis and 1 or more high risk criteria:
	suspected sepsis and 1 or more high	refreshed	update		<ul> <li>arrange for the senior clinical decision</li> </ul>
	risk criteria:				maker to immediately assess the person's
	arrange for immediate review by the				condition and think about alternative
	senior clinical decision maker to assess				diagnoses to sepsis
	the person and think about alternative				<ul> <li>carry out a venous blood test for the</li> </ul>
	diagnoses to sepsis				following:
					- blood gas including glucose and lactate
	A 'senior clinical decision maker' for				measurement
	people aged 18 years or over should				- blood culture
	be someone who is authorised to				- full blood count
	prescribe antibiotics, such as a doctor				- C-reactive protein
	of grade CT3/ST3 or above or				- urea and electrolytes
	equivalent, such as an advanced nurse				- creatinine
	practitioner with antibiotic prescribing				- a clotting screen
	responsibilities, depending on local				<ul> <li>give antibiotics in line with</li> </ul>
	arrangements. A 'senior decision				recommendations 1.7.2 and 1.7.3 and the
	maker' for people aged 12 to 17 years				section on choice of antibiotic therapy for
	is a paediatric or emergency care				people with suspected sepsis
	qualified doctor of grade ST4 or above				<ul> <li>discuss with an appropriate consultant</li> </ul>
	or equivalent.				(this may be the consultant under whom
	<ul> <li>carry out a venous blood test for the</li> </ul>				the patient is admitted or a consultant
	following:				covering acute medicine, anaesthetics).
	- blood gas including glucose and				
	lactate measurement				
	- blood culture				
	- full blood count				
	- C-reactive protein				
	- urea and electrolytes				
	- creatinine				
	- a clotting screen				
	• give a broad-spectrum antimicrobial				

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at the maximum recommended dose		
without delay (within 1 hour of		
identifying that they meet any high		
risk criteria in an acute hospital		
setting) in line with recommendations		
in section 1.7 antibiotic treatment in		
people with suspected sepsis		
• discuss with a consultant.		
Appropriate consultant may be the		
consultant under whom the patient is		
admitted or a consultant covering		
acute medicine, anaesthetics.		
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1.6.2	For adults, children and young people aged 12 years and over with suspected sepsis and any high risk criteria and lactate over 4 mmol/litre, or systolic blood pressure less than 90 mmHg:  • give intravenous fluid bolus without delay (within 1 hour of identifying that they meet any high risk criteria in an acute hospital setting) in line with recommendations in section 1.8 intravenous fluids in people with suspected sepsis and  • refer to critical care for review of management including need for central venous access and initiation of inotropes or vasopressors.  Referral may be a formal referral process or discussion with specialist in intensive care or intensive care outreach team.  Critical care means an intensivist or intensive care outreach team, or specialist in intensive care or paediatric intensive care.	amended and refreshed	-Taking out the population not covered by this update (that is, 12 to 15 years old) - Integrating former footnotes	1.10.4	For people aged 16 or over with suspected sepsis, any high risk criteria, and either lactate over 4 mmol/litre or systolic blood pressure less than 90 mmHg:  • give intravenous fluid bolus without delay (within 1 hour of identifying that they are high risk of severe illness or death from sepsis) in line with recommendations on intravenous fluids for people with suspected sepsis and  • refer to critical care specialist or team for them to review the management of the person's condition, including their need for central venous access and initiation of inotropes or vasopressors.  Referral may be a formal referral process or discussion with specialist in intensive care or intensive care outreach team.

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1.6.3	For adults, children and young people aged 12 years and over with suspected sepsis and any high risk criteria and lactate between 2 and 4 mmol/litre:  • give intravenous fluid bolus without delay (within 1 hour of identifying that they meet any high risk criteria in an acute hospital setting) in line with recommendations in section 1.8 intravenous fluids in people with suspected sepsis.	amended	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.10.5	For people aged 16 or over with suspected sepsis, any high risk criteria and lactate between 2 and 4 mmol/litre, give intravenous fluid bolus without delay (within 1 hour of identifying that they meet any high risk criteria in an acute hospital setting) in line with recommendations on intravenous fluids for people with suspected sepsis.
1.6.4	For adults, children and young people aged 12 years and over with suspected sepsis and any high risk criteria and lactate below 2 mmol/litre:  • consider giving intravenous fluid bolus (in line with recommendations in section 1.8 intravenous fluids in people with suspected sepsis).	amended	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.10.6	For people aged 16 or over with suspected sepsis, any high risk criteria and lactate below 2 mmol/litre, consider giving intravenous fluid bolus (in line with recommendations on intravenous fluids for people with suspected sepsis).
1.6.5	Monitor people with suspected sepsis who meet any high risk criteria continuously, or a minimum of once every 30 minutes depending on setting. Physiological track and trigger systems should be used to monitor all adult patients in acute hospital settings. [This recommendation is	amended	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.10.7	Monitor people aged 16 or over who meet any high risk criteria continuously, or a minimum of once every 30 minutes depending on setting. Physiological track and trigger systems should be used to monitor all adult patients. [This recommendation is adapted from NICE's guideline on acutely ill patients in hospital.]

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	adapted from NICE's guideline on acutely ill patients in hospital.]				
1.6.6	Monitor the mental state of adults, children and young people aged 12 years and over with suspected sepsis. Consider using a scale such as the Glasgow Coma Scale (GCS) or AVPU ('alert, voice, pain, unresponsive') scale.	amended	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.10.8	Monitor the mental state of people aged 16 or over with suspected sepsis. Consider using a scale such as the Glasgow Coma Scale (GCS) or AVPU ('alert, voice, pain, unresponsive') scale.
1.6.7	Alert a consultant to attend in person if an adult, child or young person aged 12 years or over with suspected sepsis and any high risk criteria fails to respond within 1 hour of initial antibiotic and/or intravenous fluid resuscitation. Failure to respond is indicated by any of:  • systolic blood pressure persistently below 90 mmHg  • reduced level of consciousness despite resuscitation  • respiratory rate over 25 breaths per minute or a new need for mechanical	amended and refreshed	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.10.9	Alert a consultant to attend in person if a person aged 16 years or over with suspected sepsis and any high risk criteria does not respond within 1 hour of initial antibiotic, intravenous fluid resuscitation, or both. Not responding is indicated by any of:  • systolic blood pressure persistently below 90 mmHg  • reduced level of consciousness despite resuscitation  • respiratory rate over 25 breaths per minute or a new need for mechanical ventilation

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	ventilation • lactate not reduced by more than 20% of initial value within 1 hour.				• lactate not reduced by more than 20% of initial value within 1 hour.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.6.8	For adults, children and young people aged 12 years and over with suspected sepsis and 2 or more moderate to high risk criteria, or systolic blood pressure 91 to 100 mmHg, carry out a venous blood test for the following:  • blood gas, including glucose and lactate measurement  • blood culture  • full blood count  • C-reactive protein  • urea and electrolytes  • creatinine  and arrange for a clinician to review the person's condition and venous lactate results within 1 hour of meeting criteria in an acute hospital setting.  A 'clinician' should be a medically qualified practitioner or equivalent who has antibiotic prescribing responsibilities.	amended and refreshed	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.11.1	For people aged 16 or over with suspected sepsis and either a 2 or more moderate- to high-risk criteria or systolic blood pressure 91 to 100 mmHg, carry out a venous blood test for the following:  • blood gas, including glucose and lactate measurement  • blood culture  • full blood count  • C-reactive protein  • urea and electrolytes  • creatinine  Arrange for a clinician to review the person's condition and venous lactate results within 1 hour of meeting criteria.  A 'clinician' should be a medically qualified practitioner or equivalent who has antibiotic prescribing responsibilities.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.6.9	For adults, children and young people aged 12 years and over with suspected sepsis who meet 2 or more moderate to high risk criteria and have lactate over 2 mmol/litre or evidence of acute kidney injury, treat as high risk and follow recommendations 1.6.1 to 1.6.7.  For definition of acute kidney injury, see NICE's guideline on acute kidney injury.	amended and refreshed	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.11.4	For people aged 16 or over with suspected sepsis who meet 2 or more moderate- to high-risk criteria and have either lactate over 2 mmol/litre or evidence of acute kidney injury, treat their condition as if they were at high risk of severe illness or death from sepsis.  For definition of acute kidney injury, see NICE's guideline on acute kidney injury.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.6.10	For adults, children and young people aged 12 years and over with suspected sepsis who meet 2 or more moderate to high risk criteria, have lactate of less than 2 mmol/litre, no evidence of acute kidney injury and in whom a definitive condition cannot be identified:  • repeat structured assessment at least hourly  • ensure review by a senior clinical decision maker within 3 hours of meeting 2 or more moderate to high risk criteria in an acute hospital setting for consideration of antibiotics.  A 'senior clinical decision maker' for people aged 18 years or over should be someone who is authorised to prescribe antibiotics, such as a doctor of grade CT3/ST3 or above or equivalent, such as an advanced nurse practitioner with antibiotic prescribing responsibilities, depending on local arrangements. A 'senior decision maker' for people aged 12 to 17 years is a paediatric or emergency care qualified doctor of grade ST4 or above	amended and refreshed	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.11.5	For people aged 16 or over with suspected sepsis who meet 2 or more moderate- to high-risk criteria, have lactate of less than 2 mmol/litre and no evidence of acute kidney injury, and in whom a definitive condition cannot be identified:  • repeat structured assessment at least hourly  • ensure a senior clinical decision maker reviews the person's condition and need for antibiotics within 3 hours of meeting 2 or more moderate to high risk criteria.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	or equivalent.				
	For definition of acute kidney injury, see NICE's guideline on acute kidney injury.				

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.6.11	For adults, children and young people aged 12 years and over with suspected sepsis who meet 2 or more moderate to high risk criteria, have lactate of less than 2 mmol/litre, no evidence of acute kidney injury and in whom a definitive condition or infection can be identified and treated:  • manage the definitive condition  • if appropriate, discharge with information depending on the setting (see recommendations 1.11.5 and 1.11.6).  For definition of acute kidney injury, see NICE's guideline on acute kidney injury.	amended and refreshed	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.11.6	For people aged 16 years or over with suspected sepsis who meet 2 or more moderate- to high-risk criteria, have lactate of less than 2 mmol/litre and no evidence of acute kidney injury, and in whom a definitive condition or infection can be identified and treated:  • manage the definitive condition  • if appropriate, discharge with information depending on the setting (see recommendations on information at discharge for people assessed for suspected sepsis but not diagnosed with sepsis).
1.6.12	For adults, children and young people aged 12 years and over with suspected sepsis who meet only 1 moderate to high risk criterion:  • arrange clinician review within 1 hour of meeting criterion for clinical assessment in an acute hospital setting  A 'clinician' should be a medically qualified practitioner or equivalent	amended	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.12.1	For people aged 16 or over with suspected sepsis who meet only 1 moderate- to highrisk criterion:  • arrange clinician review within 1 hour of meeting criterion for clinical assessment  • perform blood tests if indicated.  A 'clinician' should be a medically qualified practitioner or equivalent who has antibiotic prescribing responsibilities.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	who has antibiotic prescribing responsibilities.  • perform blood tests if indicated.				
1.6.13	For adults, children and young people aged 12 years and over with suspected sepsis who meet only 1 moderate to high risk criterion and in whom a definitive condition can be identified and treated:  • manage the definitive condition  • if appropriate, discharge with information depending on setting (see recommendations 1.11.5 and 1.11.6).	amended	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.12.4	For people aged 16 or over with suspected sepsis who meet only 1 moderate- to highrisk criterion and in whom a definitive condition can be identified and treated:  • manage the definitive condition  • if appropriate, discharge with information depending on setting (see recommendations on information at discharged for people assessed for suspected sepsis but not diagnosed with sepsis).

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.6.14	For adults, children and young people aged 12 years and over with suspected sepsis who meet only 1 moderate to high risk criterion, have lactate of less than 2 mmol/litre, no evidence of acute kidney injury and in whom a definitive condition cannot be identified:  • repeat structured assessment at least hourly  • ensure review by a senior clinical decision maker within 3 hours of meeting moderate to high criterion in an acute hospital setting for consideration of antibiotics.  A 'senior clinical decision maker' for people aged 18 years or over should be someone who is authorised to prescribe antibiotics, such as a doctor of grade CT3/ST3 or above or equivalent, such as an advanced nurse practitioner with antibiotic prescribing responsibilities, depending on local arrangements. A 'senior decision maker' for people aged 12 to 17 years is a paediatric or emergency care qualified doctor of grade ST4 or above	amended	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.12.3	For people aged 16 or over with suspected sepsis who meet only 1 moderate- to highrisk criterion, have lactate of less than 2 mmol/litre and no evidence of acute kidney injury, and in whom a definitive condition cannot be identified:  • repeat structured assessment at least hourly  • ensure a senior clinical decision maker reviews the person's condition and need for antibiotics within 3 hours of meeting moderate to high criterion.

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	or equivalent.				
	For definition of acute kidney injury, see NICE's guideline on acute kidney injury.				

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.6.15	Arrange clinical assessment of adults, children and young people aged 12 years and over who have suspected sepsis and no high risk or moderate to high risk criteria and manage according to clinical judgement.  Clinical assessment should be carried out by a medically qualified practitioner or equivalent who has antibiotic prescribing responsibilities.	amended and refreshed	Taking out the population not covered by this update (that is, 12 to 15 years old)	1.13.1	Arrange clinical assessment of people aged 16 years or over who have suspected sepsis and do not meet any high-risk or moderate- to high-risk criteria, and use clinical judgement to manage their condition.  Clinical assessment should be carried out by a medically qualified practitioner or equivalent who has antibiotic prescribing responsibilities.
-	1.7 Antibiotic treatment in people with suspected sepsis	-	-	-	-
1.7.1	Pre-alert secondary care (through GP or ambulance service) when any high risk criteria are met in a person with suspected sepsis outside of an acute hospital, and transfer them immediately.	refreshed		1.6.2	Pre-alert secondary care (through GP or ambulance service) when any high risk criteria are met in a person aged 16 or over with suspected sepsis in the community or in a custodial setting, and transfer them immediately.
1.7.2	Ensure urgent assessment mechanisms are in place to deliver antibiotics when any high risk criteria are met in secondary care (within 1 hour of meeting a high risk criterion in an acute hospital setting).	deleted	superceded by new recommendations	-	

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.7.3	Ensure GPs and ambulance services have mechanisms in place to give antibiotics for people with high risk criteria in pre-hospital settings in locations where transfer time is more than 1 hour.	amended	Amended to ensure that time between arrival at and admission into the emergency department is taken into account	1.7.1	In locations where time before admission to the emergency department (including any transfer time) is more than 1 hour, ensure GPs and ambulance services have mechanisms in place to give antibiotics to people with high risk criteria in prehospital settings.
1.7.4	For patients in hospital who have suspected infections, take microbiological samples before prescribing an antimicrobial and review the prescription when the results are available. For people with suspected sepsis take blood cultures before antibiotics are given. [This recommendation is adapted from NICE's guideline on antimicrobial stewardship.]	none	-	1.9.1	-
1.7.5	If meningococcal disease is specifically suspected (fever and purpuric rash) give appropriate doses of parenteral benzyl penicillin in community settings and intravenous ceftriaxone in hospital settings. [This recommendation is adapted from NICE's guideline on meningitis (bacterial) and	none	-	1.14.1	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	meningococcal septicaemia in under 16s.]				
1.7.6	For all people with suspected sepsis where the source of infection is clear use existing local antimicrobial guidance.	refreshed		1.14.2	For all people with suspected sepsis and a clear source of infection, use existing local antimicrobial guidance.
1.7.7	For people aged 18 years and over who need an empirical intravenous antimicrobial for a suspected infection but who have no confirmed diagnosis, use an intravenous antimicrobial from the agreed local formulary and in line with local (where available) or national guidelines. [This recommendation is adapted from NICE's guideline on antimicrobial stewardship.]	refreshed	clarity	1.14.7	For people aged 18 years and over who need an empirical intravenous antimicrobial for a suspected infection but who have no confirmed diagnosis, use an intravenous antimicrobial from the agreed local formulary and in line with local (where available) or national guidelines. [This recommendation is adapted from NICE's guideline on antimicrobial stewardship.]
1.7.8	For people aged up to 17 years (for neonates see recommendation 1.7.12) with suspected community acquired sepsis of any cause give ceftriaxone 80 mg/kg once a day with a maximum dose of 4 g daily at any age. [This recommendation is adapted from NICE's guideline on meningitis	refreshed	clarity	1.14.5	For people aged up to 17 years (excluding neonates) with suspected community acquired sepsis of any cause give ceftriaxone 80 mg/kg once a day with a maximum dose of 4 g daily at any age. For neonates, see recommendation 1.7.10 [was 1.7.12]. [This recommendation is adapted from NICE's guideline on

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	(bacterial) and meningococcal septicaemia in under 16s.]				meningitis (bacterial) and meningococcal septicaemia in under 16s.]
1.7.9	For people aged up to 17 years with suspected sepsis who are already in hospital, or who are known to have previously been infected with or colonised with ceftriaxone-resistant bacteria, consult local guidelines for choice of antibiotic.	refreshed	clarity	1.14.6	For people aged up to 17 years (excluding neonates) with suspected sepsis who are already in hospital, or who are known to have previously been infected with or colonised with ceftriaxone-resistant bacteria, consult local guidelines for choice of antibiotic. For neonates, see recommendation 1.7.9 [was 1.7.11].
1.7.13	Follow the recommendations in NICE's guideline on antimicrobial stewardship: systems and processes for effective antimicrobial medicine when prescribing and using antibiotics to treat people with suspected or confirmed sepsis.	none	-	1.14.4	-
-	1.8 Intravenous fluids in people with suspected sepsis	-	-	-	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.8.1	If patients over 16 years need intravenous fluid resuscitation, use crystalloids that contain sodium in the range 130 mmol/litre to 154 mmol/litre with a bolus of 500 ml over less than 15 minutes. [This recommendation is from NICE's guideline on intravenous fluid therapy in adults in hospital.]	none	-	1.15.1	-
1.8.4	Reassess the patient after completion of the intravenous fluid bolus, and if no improvement give a second bolus. If there is no improvement after a second bolus alert a consultant to attend (in line with recommendations 1.6.7, 1.6.22 and 1.6.37).	none	-	1.15.5	-
1.8.6	If using a pump or flow controller to deliver intravenous fluids for resuscitation to people over 12 years with suspected sepsis who need fluids in bolus form ensure device is capable of delivering fluid at required rate for example at least 2000 ml/hour in adults.	none	-	1.15.4	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.8.7	Do not use starch based solutions or hydroxyethyl starches for fluid resuscitation for people with sepsis. [This recommendation is adapted from NICE's guidelines on intravenous fluid therapy in adults in hospital and intravenous fluid therapy in children and young people in hospital.]	none	-	1.15.3	-
1.8.8	Consider human albumin solution 4 to 5% for fluid resuscitation only in patients with sepsis and shock. [This recommendation is adapted from NICE's guideline on intravenous fluid therapy in adults in hospital.]	none	-	1.15.2	-
-	1.9 Using oxygen in people with suspected sepsis	-	-	-	-
1.9.1	Give oxygen to achieve a target saturation of 94% to 98% for adult patients or 88% to 92% for those at risk of hypercapnic respiratory failure.	none	-	1.16.1	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.9.2	1.9.2 Oxygen should be given to children with suspected sepsis who have signs of shock or oxygen saturation (SpO2) of less than 92% when breathing air. Treatment with oxygen should also be considered for children with an SpO2 of greater than 92%, as clinically indicated. [This recommendation is adapted from NICE's guideline on fever in under 5s.]  Be aware that some pulse oximeters can underestimate or overestimate oxygen saturation levels, especially if the saturation level is borderline. Overestimation has been reported in people with dark skin. See also the NHS England Patient Safety Alert on the risk of harm from inappropriate placement of pulse oximeter probes.	none	-	1.16.2	
-	1.10 Finding the source of infection in people with suspected sepsis	-	-	-	-
1.10.1	Carry out a thorough clinical examination to look for sources of infection, including sources that might need surgical drainage, as part of the initial assessment.	refreshed	clarity	1.3.6	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.10.2	Tailor investigations of the sources of infection to the person's clinical history and findings on examination.	refreshed	clarity	1.17.1	Tailor investigations of the sources of infection to the person's clinical history and to findings from examination.
1.10.3	Consider urine analysis and chest X-ray to identify the source of infection in all people with suspected sepsis.	none	-	1.17.2	-
1.10.4	Consider imaging of the abdomen and pelvis if no likely source of infection is identified after clinical examination and initial tests.	none	-	1.17.3	-
1.10.5	Involve the adult or paediatric surgical and gynaecological teams early on if intra-abdominal or pelvic infection is suspected in case surgical treatment is needed.	none	-	1.17.4	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.10.6	Do not perform a lumbar puncture without consultant instruction if any of the following contraindications are present:  • signs suggesting raised intracranial pressure or reduced or fluctuating level of consciousness (Glasgow Coma Scale score less than 9 or a drop of 3 points or more)  • relative bradycardia and hypertension  • focal neurological signs  • abnormal posture or posturing  • unequal, dilated or poorly responsive pupils  • papilloedema  • abnormal 'doll's eye' movements  • shock  • extensive or spreading purpura  • after convulsions until stabilised  • coagulation abnormalities or coagulation results outside the normal range or platelet count below  100x109/litre or receiving anticoagulant therapy  • local superficial infection at the lumbar puncture site  • respiratory insufficiency in children.	none		1.17.5	

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	[This recommendation is adapted from NICE's guideline on meningitis (bacterial) and meningococcal septicaemia in under 16s.]				
-	1.11 Information and support for people with sepsis and their families and carers	-	-	-	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.11.1	<ul> <li>1.11.1 Ensure a care team member is nominated to give information to families and carers, particularly in emergency situations such as in the emergency department. This should include:</li> <li>an explanation that the person has sepsis, and what this means</li> <li>an explanation of any investigations and the management plan</li> <li>regular and timely updates on treatment, care and progress.</li> </ul>	none	-	1.18.1	
1.11.2	Ensure information is given without using medical jargon. Check regularly that people understand the information and explanations they are given.	none	-	1.18.2	-
1.11.3	Give people with sepsis and their family members and carers opportunities to ask questions about diagnosis, treatment options, prognosis and complications. Be willing to repeat any information as needed.	none	-	1.18.3	-
1.11.4	Give people with sepsis and their families and carers information about national charities and support groups	none	-	1.18.4	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	that provide information about sepsis and the causes of sepsis.				
1.11.5	1.11.5 Give people who have been assessed for sepsis but have been discharged without a diagnosis of sepsis (and their family or carers, if appropriate) verbal and written information about:  • what sepsis is, and why it was suspected  • what tests and investigations have been done  • instructions about which symptoms to monitor  • when to get medical attention if their illness continues  • how to get medical attention if they need to seek help urgently.	none	-	1.19.1	
1.11.6	Confirm that people understand the information they have been given, and what actions they should take to get help if they need it.	none	-	1.19.2	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.11.7	Ensure people who are at increased risk of sepsis (for example after surgery) are told before discharge about symptoms that should prompt them to get medical attention and how to get it.  See NICE's guideline on neutropenic sepsis for information for people with neutropenic sepsis (recommendation 1.1.1.1).	none	-	1.20.1	
1.11.8	Ensure people and their families and carers if appropriate have been informed that they have had sepsis.	none	-	1.21.1	-
1.11.9	Ensure discharge notifications to GPs include the diagnosis of sepsis.	none	-	1.21.2	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.11.10	1.11.10 Give people who have had sepsis (and their families and carers, when appropriate) opportunities to discuss their concerns. These may include:  • why they developed sepsis  • whether they are likely to develop sepsis again  • if more investigations are necessary  • details of any community care needed, for example, related to peripherally inserted central venous catheters (PICC) lines or other intravenous catheters  • what they should expect during recovery  • arrangements for follow-up, including specific critical care follow up if relevant  • possible short-term and long-term problems.	none		1.21.3	
1.11.11	Give people who have had sepsis and their families and carers information about national charities and support groups that provide information about sepsis and causes of sepsis.	none	-	1.21.4	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
1.11.12	1.11.12 Advise carers they have a legal right to have a carer's assessment of their needs, and give them information on how they can get this.  See NICE's guideline on rehabilitation after critical illness in adults for recommendations on rehabilitation and follow up after critical illness.  See NICE's guideline on meningitis (bacterial) and meningococcal septicaemia in under 16s for follow up of people who have had meningococcal septicaemia.	none	-	1.21.5	
-	1.12 Training and education	-	-	-	-
1.12.1	Ensure all healthcare staff and students involved in assessing people's clinical condition are given regular, appropriate training in identifying people who might have sepsis. This includes primary, community care and hospital staff including those working in care homes.	none	-	1.22.1	-
1.12.2	1.12.2 Ensure all healthcare professionals involved in triage or early management are given regular	none	-	1.22.2	-

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Recommendation number in 2016 guideline	Recommendation in 2016 guideline, or section heading in 2016 guideline	Changes made	Rationale for changes	Proposed recommendation number for consultation on 2023 guideline	Proposed recommendation in 2023 guideline
	appropriate training in identifying, assessing and managing sepsis. This should include: • risk stratification strategies • local protocols for early treatments, including antibiotics and intravenous fluids • criteria and pathways for escalation, in line with their health care setting.				

## Recommendations not included in the draft for consultation

The following recommendations do not relate to the population covered by the update, and are therefore not included in the consultation. The recommendation numbers are listed section by section for ease of reading. The numbers are those used in the 2016 version of <a href="NICE's guideline on sepsis">NICE's guideline on sepsis</a>.

- 1.3.2 to 1.3.5
- Table 2
- 1.4.5 to 1.4.7
- Table 3
- 1.4.8 to 1.4.10

- 1.6.16 to 1.6.46
- 1.7.10 to 1.7.12
- 1.8.2, 1.8.3, 1.8.5
- 1.10.7.

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