

Suspected sepsis: evaluating risk of severe illness or death in all settings

Age	High risk	Moderate to high risk
Heart rate (beats per minute)		
Under 1	160 or more	150 to 159
1 or 2	150 or more	140 to 149
3 or 4	140 or more	130 to 139
All ages	Less than 60	
Respiratory rate (breaths per minute)		
Under 1	60 or more	50 to 59
1 or 2	50 or more	40 to 49
3 or 4	40 or more	35 to 39
Temperature (°C)		
Under 3 months	38 or more	
3 to 6 months		39 or more
All ages	Less than 36	
Respiration: other criteria		
All ages	<ul style="list-style-type: none"> • Oxygen saturation < 90% in air, OR increased oxygen requirement over baseline • Grunting • Apnoea 	<ul style="list-style-type: none"> • Oxygen saturation < 92% in air, OR increased oxygen requirement over baseline • Nasal flaring
<p>Note: 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.</p>		

Table continues over page ➤

Suspected sepsis: evaluating risk of severe illness or death in all settings

Age	High risk	Moderate to high risk
Behaviour		
All ages	<ul style="list-style-type: none"> No response to social cues Appears ill to a healthcare professional Does not wake, or if roused does not stay awake Weak high-pitched or continuous cry 	<ul style="list-style-type: none"> Not responding normally to social cues No smile Wakes only with prolonged stimulation Decreased activity Parent or carer concern that child is behaving differently from usual
Other criteria		
All ages	<ul style="list-style-type: none"> Mottled or ashen appearance Cyanosis of skin, lips or tongue Non-blanching rash 	<ul style="list-style-type: none"> Capillary refill time 3 seconds or more Reduced urine output OR for catheterised patients, less than 1 ml/kg of urine per hour Pallor of skin, lips or tongue Leg pain Cold hands or feet
All ages	<p style="text-align: center;">Low risk</p> <p style="text-align: center;">No high risk or moderate to high risk criteria met</p>	



Also see the visual summaries on:

[Managing risk of severe illness or death outside acute hospital settings](#)
[Managing risk of severe illness or death in acute hospital settings](#)

Suspected sepsis: evaluating risk of severe illness or death in all settings

Age	High risk	Moderate to high risk
Heart rate (beats per minute)		
5	130 or more	120 to 129
6 or 7	120 or more	110 to 119
8 to 11	115 or more	105 to 114
All ages	Less than 60	
Respiratory rate (breaths per minute)		
5	29 or more	24 to 28
6 or 7	27 or more	24 to 26
8 to 11	25 or more	22 to 24
Temperature (°C)		
All ages		Less than 36 (tympanic temp.)
Respiration: other criteria		
All ages	<ul style="list-style-type: none"> Oxygen saturation < 90% in air, OR increased oxygen requirement over baseline 	<ul style="list-style-type: none"> Oxygen saturation < 92% in air, OR increased oxygen requirement over baseline
<p>Note: 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.</p>		

Table continues over page ➤

Suspected sepsis: evaluating risk of severe illness or death in all settings

Age	High risk	Moderate to high risk
Behaviour		
All ages	<ul style="list-style-type: none"> Objective evidence of altered mental state Appears ill to a healthcare professional Does not wake, or if roused does not stay awake 	<ul style="list-style-type: none"> Not behaving normally Decreased activity Parent or carer concern that child is behaving differently from usual
Other criteria		
All ages	<ul style="list-style-type: none"> Mottled or ashen appearance Cyanosis of skin, lips or tongue 	<ul style="list-style-type: none"> Capillary refill time 3 seconds or more Reduced urine output OR for catheterised patients, less than 1 ml/kg of urine per hour Leg pain Cold hands or feet
All ages	<p style="text-align: center;">Low risk</p> <p style="text-align: center;">No high risk or moderate to high risk criteria met</p>	



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[Managing risk of severe illness or death outside acute hospital settings](#)
[Managing risk of severe illness or death in acute hospital settings](#)

Suspected sepsis: evaluating risk of severe illness or death in all settings

High risk

Moderate to high risk

Heart rate (beats per minute)

More than 130

91 to 130 (in pregnancy: 100 to 130)

Respiratory rate (breaths per minute)

25 or more, OR

new need for 40% oxygen or more to maintain saturation more than 92% (or more than 88% in known chronic obstructive pulmonary disease)

21 to 24

Note: 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.



Temperature (°C)

Less than 36 (tympanic temperature)

Systolic blood pressure (mmHg)

90 or less, OR

more than 40 below usual

91 to 100

Behaviour

- Objective evidence of altered mental state

- History from patient, friend or relative of new onset of altered behaviour/mental state
- History of acute deterioration of functional ability

Table continues over page ➤

Suspected sepsis: evaluating risk of severe illness or death in all settings

High risk

Moderate to high risk

Other criteria

- Not passed urine in previous 18 hours, or for catheterised patients passed less than 0.5 ml/kg of urine per hour
- Mottled or ashen appearance
- Cyanosis of skin, lips or tongue

- Not passed urine in the past 12 to 18 hours, **OR** for catheterised patients passed 0.5 to 1 ml/kg of urine per hour
- Impaired immune system (illness or drugs, including oral steroids)
- Trauma, surgery or invasive procedures in last 6 weeks
- New-onset arrhythmia
- Signs of potential infection
 - redness
 - swelling or discharge at surgical site
 - breakdown of wound

Low risk

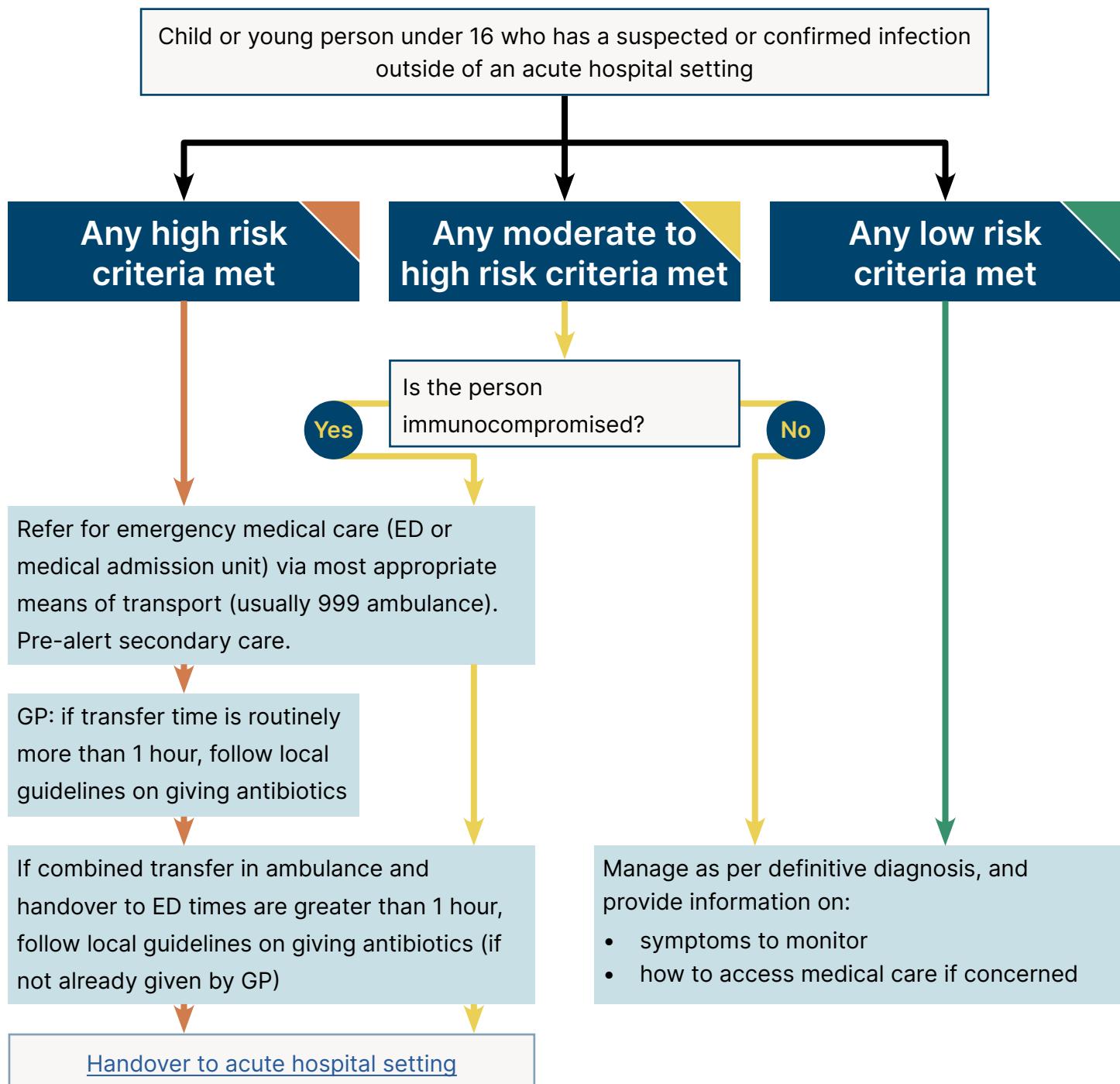
No **high risk** or **moderate to high risk** criteria met



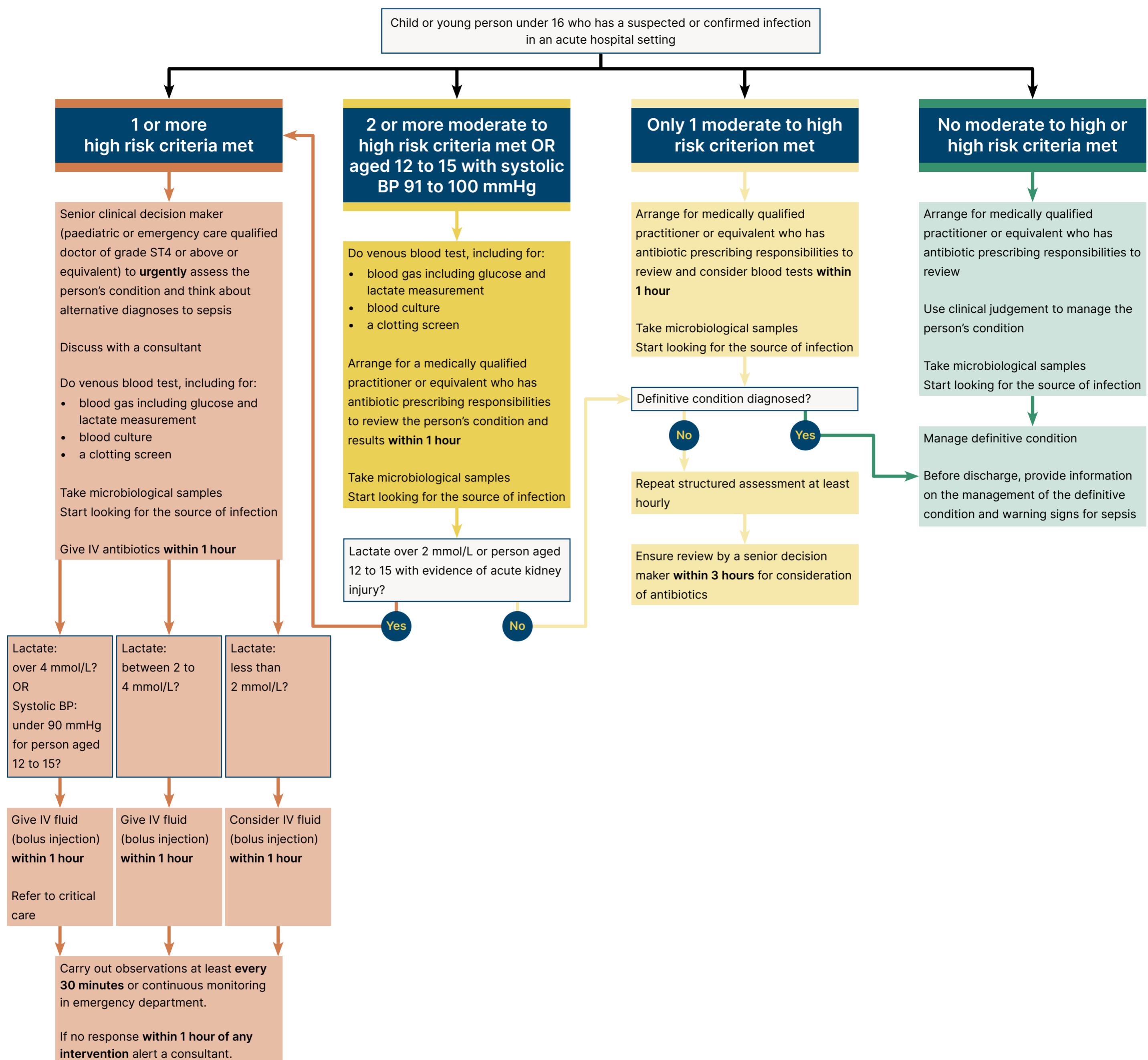
Also see the visual summaries on:

[Managing risk of severe illness or death outside acute hospital settings](#)
[Managing risk of severe illness or death in acute hospital settings](#)

Suspected sepsis: managing risk of severe illness or death outside acute hospital settings



Suspected sepsis: managing risk of severe illness or death in acute hospital settings



Suspected sepsis: evaluating risk of severe illness or death in all settings

High risk

Moderate to high risk

Heart rate (beats per minute)

More than 130

91 to 130 (in pregnancy: 100 to 130)

Respiratory rate (breaths per minute)

25 or more, OR

new need for 40% oxygen or more to maintain saturation more than 92% (or more than 88% in known chronic obstructive pulmonary disease)

21 to 24

Note: 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.

Temperature (°C)

Less than 36 (tympanic temperature)

Systolic blood pressure (mmHg)

90 or less, OR

more than 40 below usual

91 to 100

Behaviour

- Objective evidence of altered mental state

- History from patient, friend or relative of new onset of altered behaviour/mental state
- History of acute deterioration of functional ability

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This diagram covers only part of the guideline content. For full details, see [NG255 Suspected sepsis in pregnant or recently pregnant people: recognition, diagnosis and early management](#). Last updated November 2025. ISBN 978-1-4731-7334-7.

Suspected sepsis: evaluating risk of severe illness or death in all settings

High risk

Moderate to high risk

Other criteria

- Not passed urine in previous 18 hours, or for catheterised patients passed less than 0.5 ml/kg of urine per hour
- Mottled or ashen appearance
- Cyanosis of skin, lips or tongue
- Non-blanching rash

- Not passed urine in the past 12 to 18 hours, **OR** for catheterised patients passed 0.5 to 1 ml/kg of urine per hour
- Impaired immune system (illness or drugs, including oral steroids)
- Trauma, surgery or invasive procedures in last 6 weeks
- New-onset arrhythmia
- Signs of potential infection
 - redness
 - swelling or discharge at surgical site
 - breakdown of wound

Low risk

No **high risk** or **moderate to high risk** criteria met



Also see the visual summaries on:

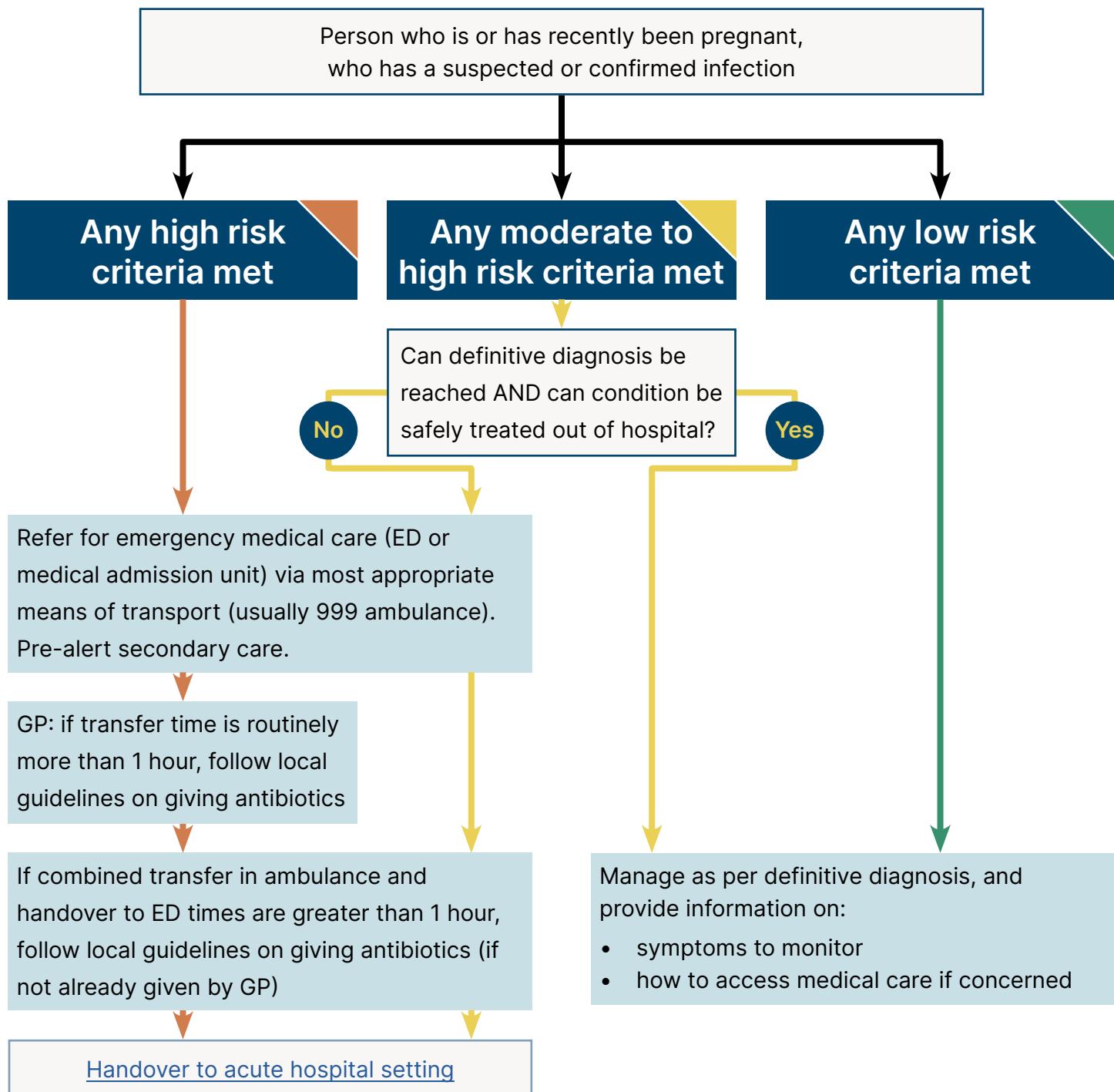
[Managing risk of severe illness or death outside acute hospital settings](#)
[Managing risk of severe illness or death in acute hospital settings](#)

This diagram covers only part of the guideline content. For full details, see

[NG255 Suspected sepsis in pregnant or recently pregnant people: recognition, diagnosis and early management.](#)

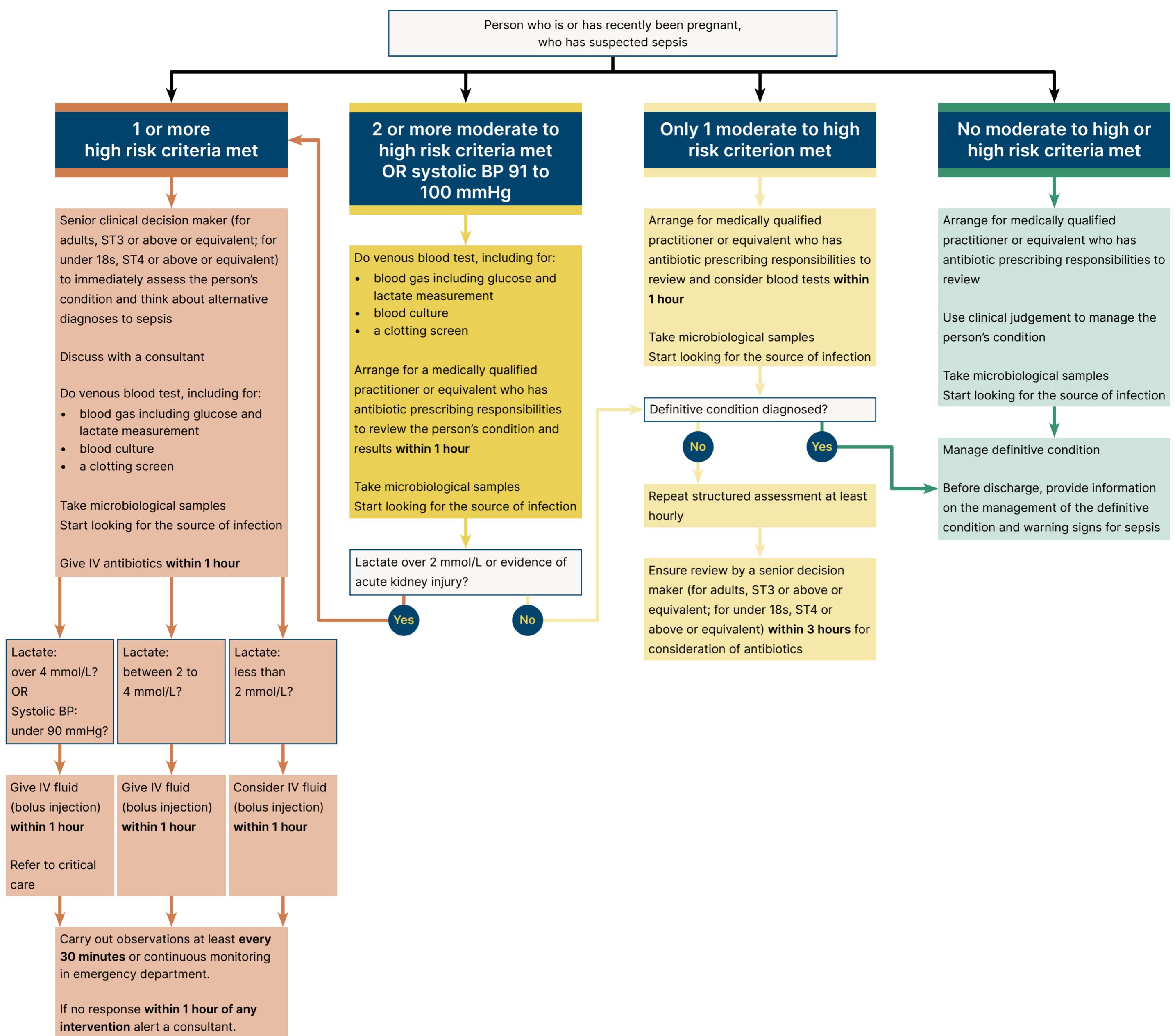
Last updated November 2025. ISBN 978-1-4731-7334-7.

Suspected sepsis: managing risk of severe illness or death outside acute hospital settings



This diagram covers only part of the guideline content. For full details, see [NG255 Suspected sepsis in pregnant or recently pregnant people: recognition, diagnosis and early management](#). Last updated November 2025. ISBN 978-1-4731-7335-4.

Suspected sepsis: managing risk of severe illness or death in acute hospital settings





Suspected sepsis: evaluating risk of severe illness or death in community or custodial settings

High risk

Moderate to high risk

Heart rate (beats per minute)

More than 130

91 to 130

Respiratory rate (breaths per minute)

25 or more, OR

new need for 40% oxygen or more to maintain saturation more than 92% (or more than 88% in known chronic obstructive pulmonary disease)

21 to 24

Note: 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.



Temperature (°C)

Less than 36 (tympanic temperature)

Systolic blood pressure (mmHg)

90 or less, OR

more than 40 below usual

91 to 100

Behaviour

- Objective evidence of altered mental state

- History from patient, friend or relative of new onset of altered behaviour/mental state
- History of acute deterioration of functional ability

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This diagram covers only part of the guideline content. For full details, see

[NG253 Suspected sepsis in people aged 16 or over: recognition, assessment and early management](#).

Last updated November 2025. ISBN 978-1-4731-7337-8.

Suspected sepsis: evaluating risk of severe illness or death in community or custodial settings

High risk

Other criteria

- Not passed urine in previous 18 hours, or for catheterised patients passed less than 0.5 ml/kg of urine per hour
- Mottled or ashen appearance
- Cyanosis of skin, lips or tongue
- Non-blanching rash

Moderate to high risk

- Not passed urine in the past 12 to 18 hours, **OR** for catheterised patients passed 0.5 to 1 ml/kg of urine per hour
- Impaired immune system (illness or drugs, including oral steroids)
- Trauma, surgery or invasive procedures in last 6 weeks
- New-onset arrhythmia
- Signs of potential infection
 - redness
 - swelling or discharge at surgical site
 - breakdown of wound

Low risk

No **high risk** or **moderate to high risk** criteria met



Also see the visual summary on:

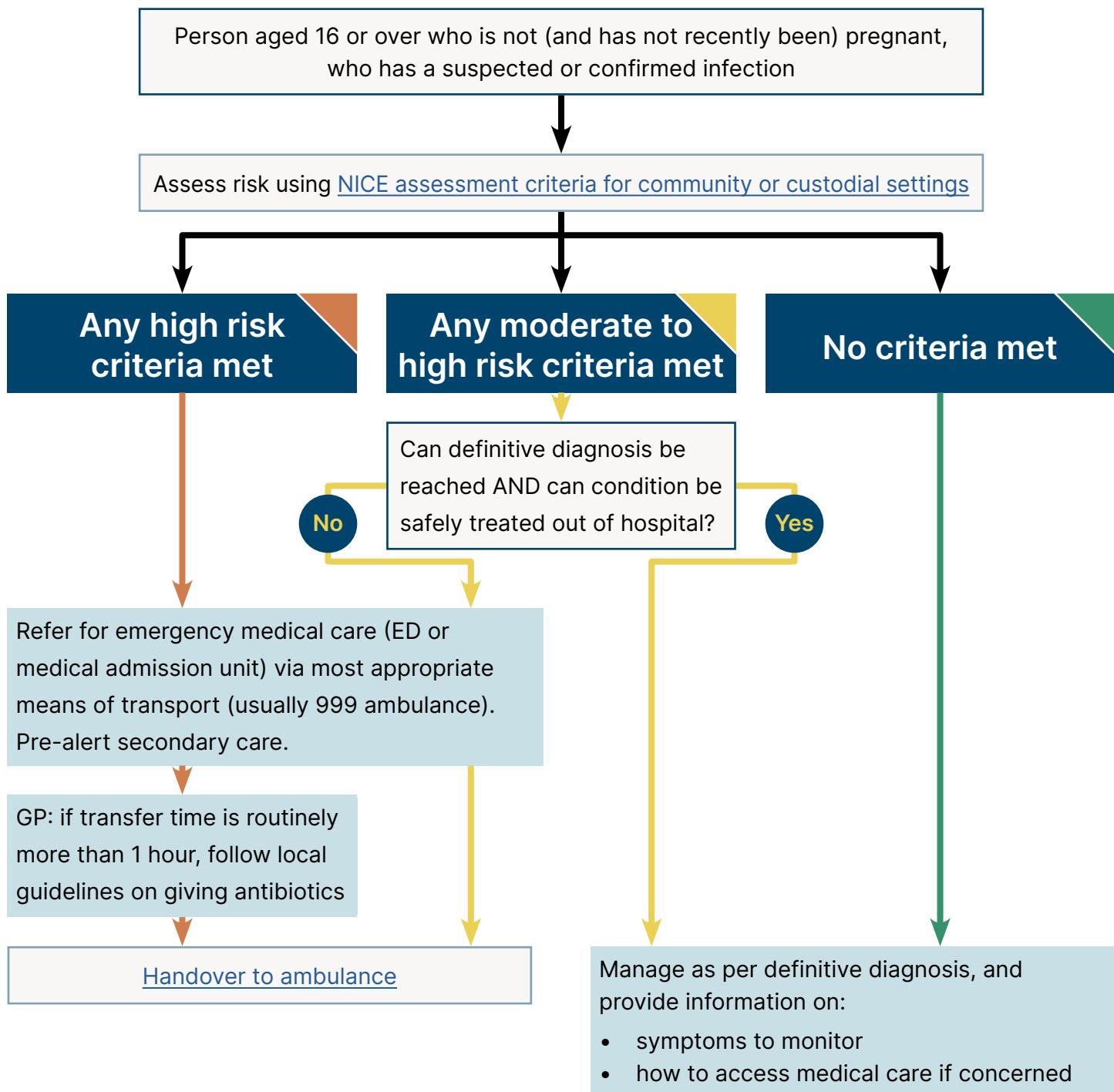
[Managing risk of severe illness or death in community or custodial settings](#)

This diagram covers only part of the guideline content. For full details, see

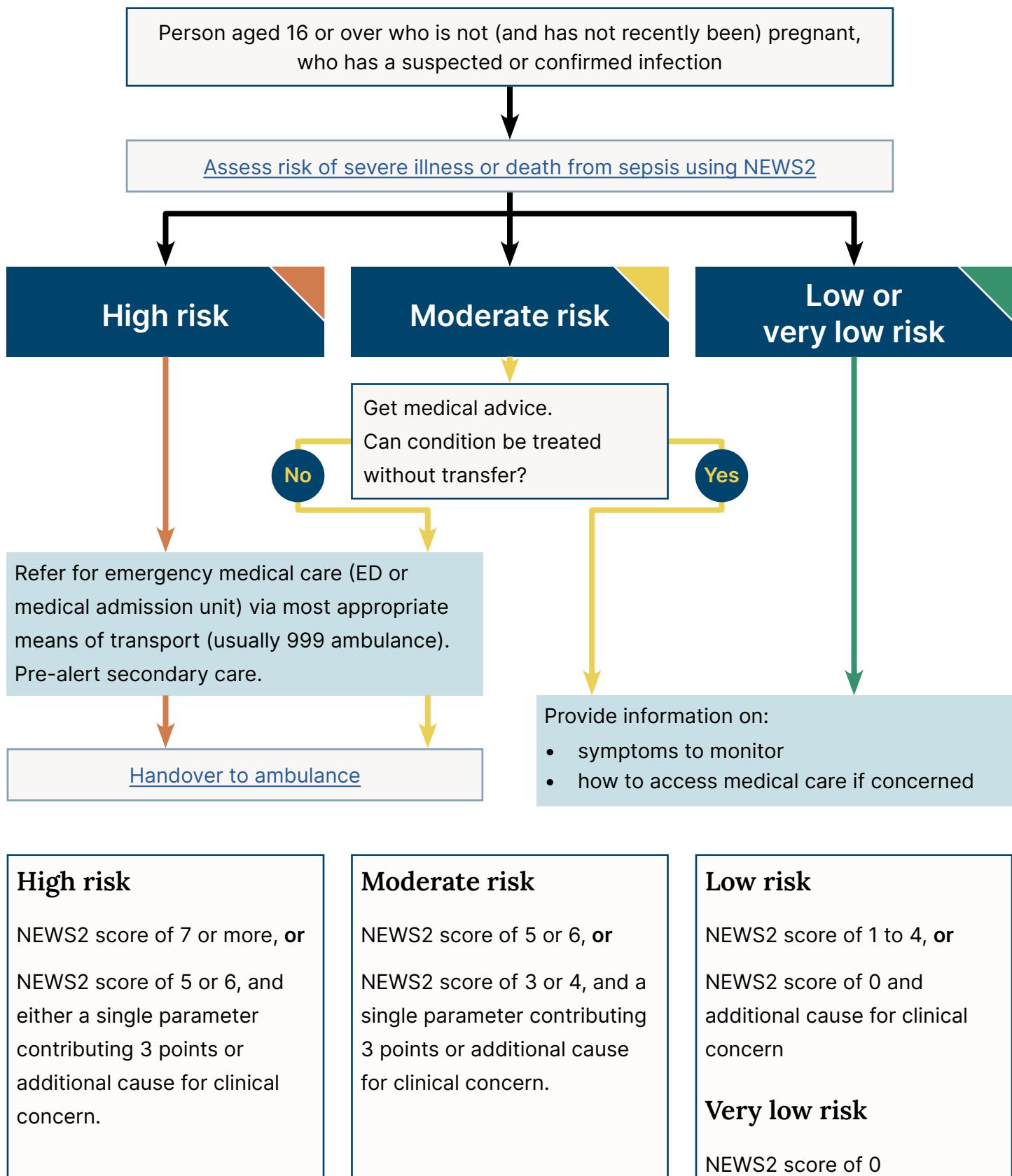
[NG253 Suspected sepsis in people aged 16 or over: recognition, assessment and early management](#)

Last updated November 2025. ISBN 978-1-4731-7337-8.

Suspected sepsis: managing risk of severe illness or death in community or custodial settings



Suspected sepsis: managing risk of severe illness or death in an acute mental health setting



This diagram covers only part of the guideline content. For full details, see

[NG253 Suspected sepsis in people aged 16 or over: recognition, assessment and early management](#).

Last updated November 2025. ISBN 978-1-4731-7339-2.

Suspected sepsis: managing risk of severe illness or death in an ambulance

Person aged 16 or over who is not (and has not recently been) pregnant, who has a suspected or confirmed infection

In an ambulance, [re-assess risk using NEWS2](#)

If consecutive NEWS2 scores are 5 or more, or there is cause for clinical concern, consider time-critical transfer and pre-alerting the hospital

If combined transfer and handover to ED times are greater than 1 hour, follow local guidelines on:

- giving antibiotics (if not already given by GP)
- giving fluids and oxygen

[Handover to acute hospital setting](#)

Giving fluids



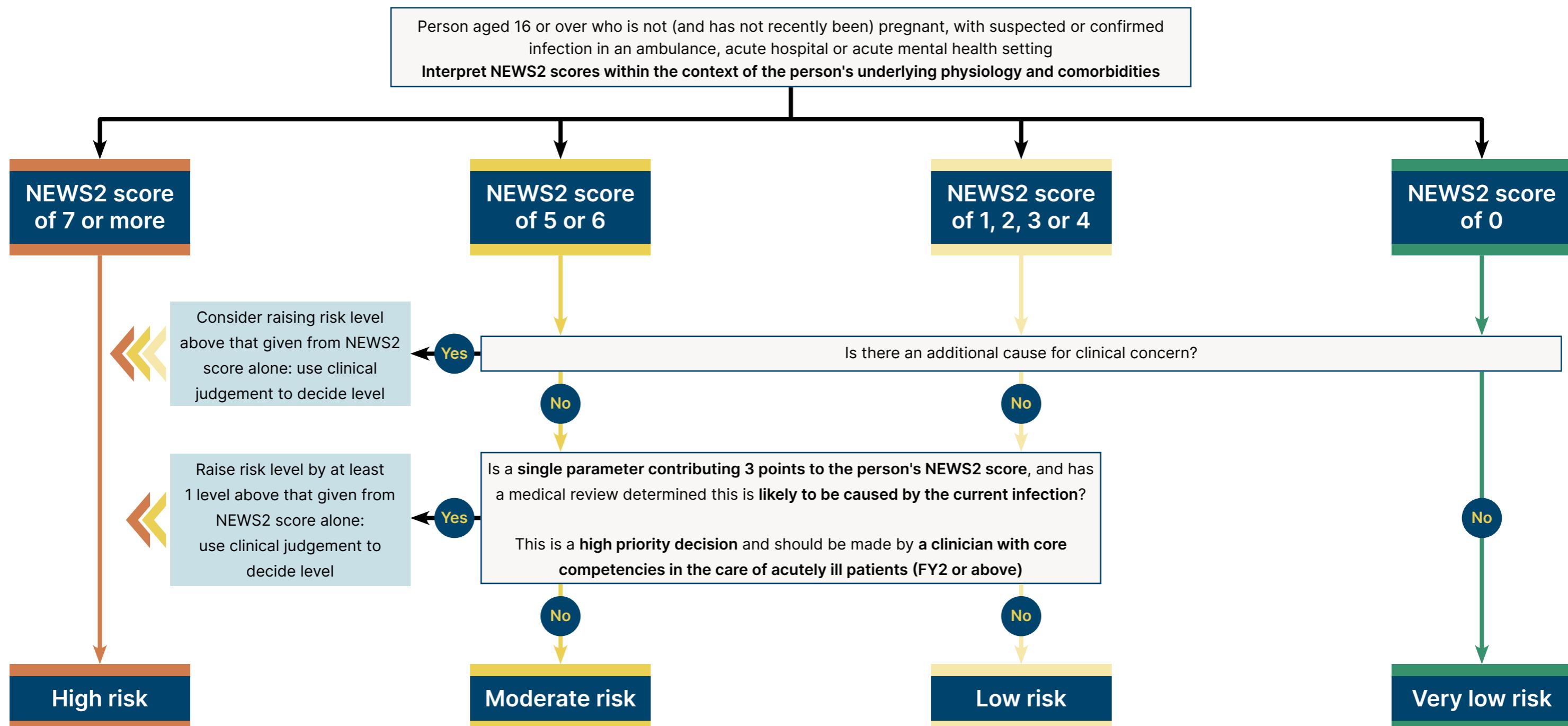
- Use crystalloids (balanced solutions if available, 0.9% saline if not)
- Give an initial bolus of 250 ml, ideally over 10 to 15 minutes
- Give more 250 ml boluses if needed, up to 1000 ml total (including any fluids previously given)
- Reassess after each fluid bolus
- If the person has not improved enough after 1000 ml, get advice from the senior clinical decision maker

Giving oxygen



- For under 18s, give oxygen if they have signs of shock and SpO₂ below 92%
- For 18 and over, give oxygen to achieve SpO₂ of 94% to 98%, or 88% to 92% for people at risk of hypercapnic respiratory failure

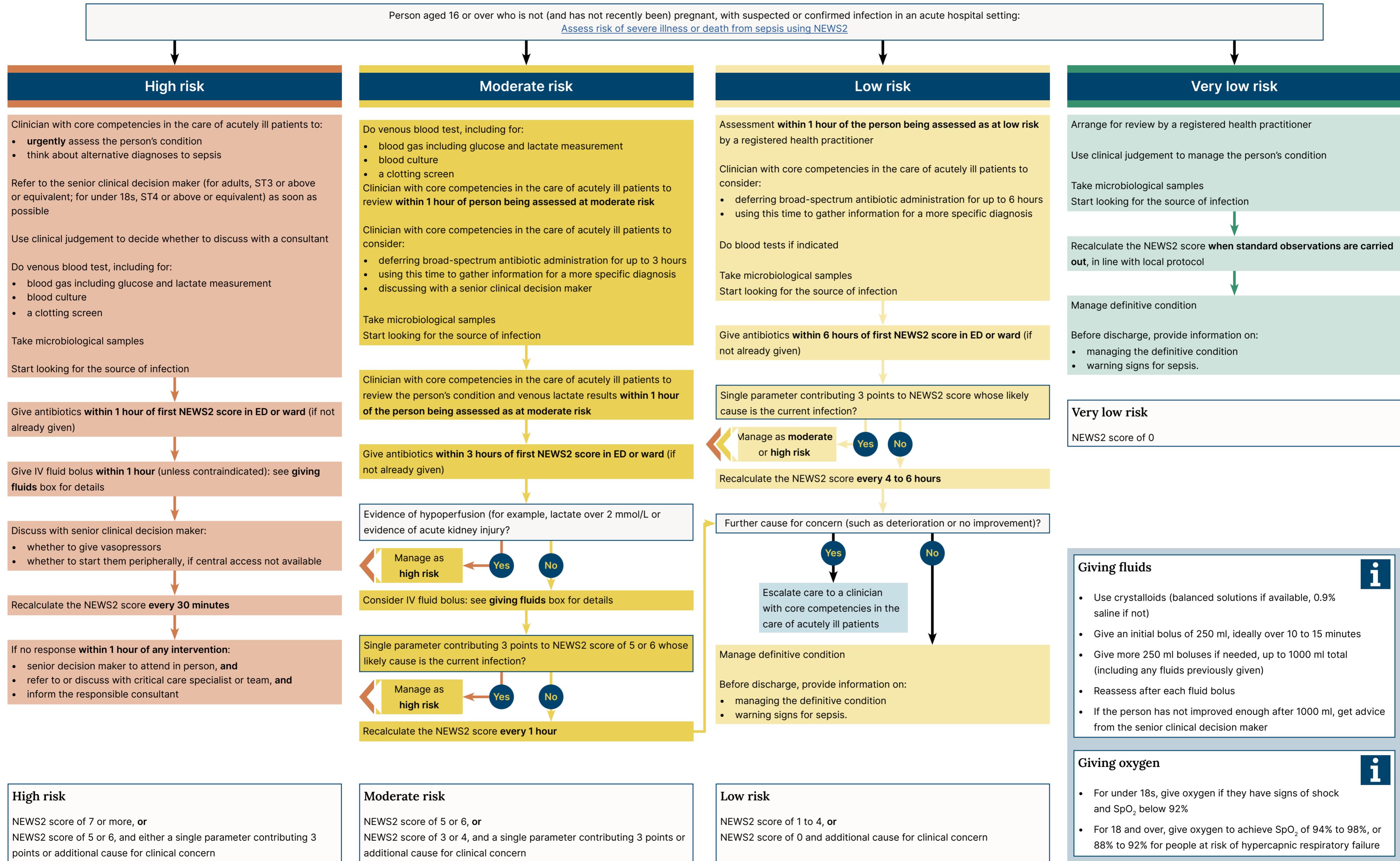
Suspected sepsis: evaluating risk of severe illness or death in acute healthcare settings with NEWS2



Also see the visual summaries on:

[Managing risk of severe illness or death in an acute mental health setting](#)
[Managing risk of severe illness or death in an ambulance](#)
[Managing risk of severe illness or death in acute hospital settings with NEWS2](#)

Suspected sepsis: managing risk of severe illness or death in acute hospital settings with NEWS2



Suspected sepsis: evaluating and managing risk of severe illness or death in acute hospital settings with NEWS2

