

1 **NATIONAL INSTITUTE FOR HEALTH AND CARE**
2 **EXCELLENCE**

3 **Scope for guideline update (starting 2024)**

4 **Suspected sepsis: recognition, diagnosis and early**
5 **management**

6
7 NICE is further updating its guideline on [Suspected sepsis: recognition, diagnosis](#)
8 [and early management NG51](#). The guideline originally published in July 2016.

9 In January 2024, NICE updated the recommendations on risk stratification and early
10 management of over 16s with suspected sepsis. The recommendations on
11 identifying the source of infection and involving surgical teams were also broadened
12 to cover risk of sepsis in all parts of the body and a wider range of interventions.
13 Details of what recommendations have been updated previously can be found on the
14 [suspected sepsis summary page](#).

15 During this earlier update, the guideline committee indicated that recommendations
16 on rapid antigen tests and molecular tests for sepsis, indicators of organ
17 hypoperfusion, intravenous fluids, and vasopressors may also need updating. In
18 addition, as part of the consultation on the draft version of this scope, stakeholders
19 shared new evidence on risk factors for sepsis (including groups that may be at
20 higher risk of developing sepsis). These areas will be considered in this update.

21 The update will be developed using the methods and processes outlined in:

- 22 • [Developing NICE guidelines: the manual](#)
23 • [Appendix M: Interim principles for methods and processes for supporting digital](#)
24 [living guideline recommendations](#)
25 • [Appendix N: Multi-criteria decision framework for deciding whether to develop or](#)
26 [update recommendations and which methods to use](#)
27 • [Appendix P: Updating guideline recommendations](#).

1 **1 Who the guideline update covers**

2 The guideline covers people of all ages with suspected sepsis.

3 Review questions 1 to 6 in this update will focus on people aged 16 or over with
4 suspected sepsis, except people who are or have recently been pregnant. These
5 questions cover the population and settings in which the national early warning score
6 (NEWS2) applies. Review question 7 will cover risk factors for all people.

7 ***Equality considerations***

8 The [equality impact assessment](#) for this update:

- 9 • lists the equality issues identified and how they have been addressed and
- 10 • explains why any populations were excluded from the scope.

11 **2 Activities, services or aspects of care covered by** 12 **this guideline update**

13 **Areas considered by this update**

14 We will look at the evidence and consider making new recommendations or updating
15 existing recommendations on:

- 16 • rapid antigen testing and PCR tests
- 17 • indicators of organ hypoperfusion
- 18 • intravenous fluid therapy
- 19 • vasopressors
- 20 • risk factors for sepsis.

21 We had planned to update a recommendation on source control, to make it easier to
22 implement. However, during the consultation on the January 2024 update,
23 stakeholders told us that improving guidance around source control could improve
24 patient outcomes. In response to this, we updated recommendation 1.17.4 as part of
25 the January 2024 update. We did not review the evidence in this area and the
26 changes were made by committee consensus. In January 2024 we added this to the
27 revised September 2022 version of the scope.

1 Recommendations in areas that are being retained from the existing guideline may
2 be edited to ensure that they meet current editorial standards and reflect the current
3 policy and practice context. Any editorial changes made will be in line with the
4 [section on routine editorial maintenance, in appendix P of the guidelines manual](#).

5 We may also amend recommendations in areas outside of the update if this is
6 needed to keep them consistent with new recommendations.

7 We will consider creating algorithms that present the recommendations on risk
8 assessment and initial management in a visual format.

9 **Proposed outline for guideline**

Area of care in the 2024 guideline	What NICE plans to do
1.1 When to suspect sepsis	No evidence review: retain recommendations from existing guideline.
1.2 People who are most vulnerable to sepsis	Review evidence and update existing recommendations as needed.
1.3 Face to face assessment of people with suspected sepsis	No evidence review: retain recommendations from existing guideline.
Under 16s: evaluating risk and managing suspected sepsis Sections 1.5 to 1.7	No evidence review: retain recommendations from existing guideline.
Pregnant or recently pregnant people: evaluating risk and managing suspected sepsis Sections 1.8 to 1.10	No evidence review: retain recommendations from existing guideline.

Over 16s: evaluating risk and managing suspected sepsis	
1.11 Evaluating risk level	Updated in January 2024. No further update planned: retain recommendations from existing guideline.
1.12 Managing suspected sepsis outside acute hospital settings	<p>Intravenous fluid therapy: review evidence and update existing recommendations as needed.</p> <p>Other recommendations: retain recommendations from existing guideline.</p>
1.13 Managing suspected sepsis in acute hospital settings	<p>Rapid antigen tests and molecular tests: review evidence and update existing recommendations as needed.</p> <p>Indicators of organ hypoperfusion and worsening sepsis: review evidence and update existing recommendations as needed.</p> <p>Intravenous fluid therapy: review evidence and update existing recommendations as needed.</p> <p>Vasopressors: review evidence and update existing recommendations as needed.</p> <p>Antibiotic management: updated in January 2024. No further update</p>

	planned: retain recommendations from existing guideline.
1.14 Choice of antibiotic therapy for people with suspected sepsis	Antibiotic management: updated in January 2024. No further update planned: retain recommendations from existing guideline.
1.15 Intravenous fluids for people with suspected sepsis	Intravenous fluids: review evidence and update existing recommendations as needed. Timing and route of administration of vasopressors: review evidence and update existing recommendations as needed.
1.16: Using oxygen for people with suspected sepsis	No evidence review: retain recommendations from existing guideline.
Finding the source of infection Sections 1.17 and 1.18	Source control: amended in January 2024. No further update planned: retain recommendations from existing guideline.
Information and support for all people with suspected sepsis Sections 1.19 to 1.23	No evidence review: retain recommendations from existing guideline.
Training and education Sections 1.24 to 1.25	No evidence review: retain recommendations from existing guideline.

1 **3 Draft review questions**

2 We have identified the following draft review questions:

3 1 In people aged 16 or over with suspected sepsis, what is the diagnostic
4 accuracy of rapid antigen tests and rapid PCR tests for diagnosing specific
5 infections?
6

7 2 In people aged 16 or over with suspected sepsis, what is the clinical and cost
8 effectiveness of rapid antigen tests and rapid PCR tests for guiding treatment?
9

10 3 In people aged 16 or over with suspected sepsis, what indicators of organ
11 hypoperfusion and worsening sepsis should be used (in addition to the NEWS2
12 score) to guide the urgency of referral to, or discussion with, a critical care
13 specialist or team?
14

15 4 In people aged 16 or over with suspected sepsis, what indicators of organ
16 hypoperfusion and worsening sepsis should be used (in addition to the NEWS2
17 score) to guide the administration of intravenous fluids for resuscitation?
18

19 5 In people aged 16 or over with suspected sepsis who require IV fluids for
20 resuscitation, what volume of IV fluid is appropriate, how quickly should IV
21 fluids be provided, and when should they be stopped?
22

23 6 In people aged 16 or over with suspected sepsis, what is the most clinically and
24 cost-effective timing and route of administration of vasopressors?
25

26 7 Which factors or groups of factors lead to a higher risk of developing sepsis?

27 **4 Economic aspects**

28 We will take economic aspects into account when making recommendations. We will
29 review the economic evidence and carry out economic analyses, using an NHS
30 perspective, as appropriate.

5 NICE guidance and quality standards that may be affected by this guideline update

- [COVID-19 rapid guideline: managing COVID-19](#) (2023) NICE guideline NG191
- [Sepsis](#) (2020) NICE quality standard QS161
- [Pneumonia \(community-acquired\): antimicrobial prescribing](#) (2019) NICE guideline NG138
- [Pneumonia \(hospital-acquired\): antimicrobial prescribing](#) (2019) NICE guideline NG139
- [Intravenous fluid therapy in adults in hospital](#) (2017) NICE guideline CG174
- [Intravenous fluid therapy in adults in hospital](#) (2014) NICE Quality Standard QS66
- [Procalcitonin testing for diagnosing and monitoring sepsis](#) (2015) NICE diagnostic guideline DG18
- [Shared decision making](#) (2021) NICE guideline NG197
- [Medicines optimisation](#) (2015) NICE guideline NG5
- [Patient experience in adult NHS services](#) (2012) NICE guideline CG138
- [Service user experience in adult mental health](#) (2011) NICE guideline CG136
- [Medicines adherence](#) (2009) NICE guideline CG76
- [SepsiTest assay for rapidly identifying bloodstream bacteria and fungi](#) (2020) NICE diagnostic guideline DG20

6 Areas we're monitoring

In the future, we plan to review the use of the paediatric early warning score (PEWS) and maternity early warning score (MEWS) tools and will consider making recommendations on them in the guideline. This may include updating the recommendations on rapid antigen tests and molecular tests for sepsis, indicators of organ hypoperfusion, intravenous fluids, and vasopressors for these populations.

Procalcitonin (PCT) testing was also indicated by the guideline committee as a possible area for update. However, PCT testing is covered by the [NICE diagnostics](#) NICE guideline update: Suspected sepsis: recognition, diagnosis, and early management (update) final scope 7 of 8

1 [guidance on procalcitonin testing for diagnosing and monitoring sepsis](#). The ongoing
2 [PRONTO](#) trial is comparing PCT-supported assessment with standard care for
3 suspected sepsis in adults at emergency departments, to measure whether this
4 approach reduces antibiotic prescriptions without increasing mortality. We will decide
5 whether to update our recommendations on PCT testing once this trial completes.

6

7 **7 Further information**

8 NICE guidelines cover health and care in England. Decisions on how they apply in
9 other UK countries are made by ministers in the [Welsh Government](#), [Scottish](#)
10 [Government](#) and [Northern Ireland Executive](#).

The guideline update is expected to be published in 2025.

To follow the progress of the update, see the [guideline in development page](#).

For an overview of current or planned updates, see our [suspected sepsis summary page](#).

Our website has information about [how NICE guidelines are developed](#).

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