



Guideline 9.2.12 - Recognition and First Aid Management of the Seriously Ill person including Sepsis

Summary

Who does this guideline apply to?

This guideline applies to adults, children and infants.

Who is the audience for this guideline?

This guideline is for use by bystanders, first aiders and first aid training providers.

Recommendations

The Australian and New Zealand Committee on Resuscitation (ANZCOR) makes the following recommendations:

1. First aiders learn to recognise a seriously ill person [Good Practice Statement]
2. If serious illness is suspected, send for an ambulance - delayed treatment can quickly lead to more serious illness and death. [Good Practice Statement]

Abbreviations

Abbreviation	Meaning/Phrase
ANZCOR	Australian and New Zealand Committee on Resuscitation

1.0 | Introduction

There are many conditions that present in the community that need urgent assessment and treatment by health care professionals. The nature of most of them is obvious but some are difficult to diagnose even under ideal circumstances in hospital. One frequent example is sepsis. There are a number of other conditions that are hard to distinguish from sepsis. However, the diagnosis of the exact condition is not important for the first aider because these conditions share a common set of symptoms and signs. It is more important to recognise that a person needs urgent medical care than to diagnose the nature of the illness. There is very little published about the first aid management or recognition of these conditions. There is a growing body of evidence about how health care professionals should “recognise the deteriorating patient.” The purpose of this guideline is to help the first aider recognise the person in need of urgent medical care but is not intended for the diagnosis of illnesses.

More information on sepsis can be found on the Australian Sepsis Network website (<https://www.australiansepsisnetwork.net.au>)

2.0 | Causes

Anyone can deteriorate quickly with a serious illness, but certain people are at higher risk including¹:

- children under 10¹,
- people over 65 years of age^{2,3,4}
- people with chronic diseases
- people with weakened immune systems
- Aboriginal and Torres Strait Islander Peoples, Maori and Pasifika

3.0 | Recognition

Early recognition of serious illness is critical as early treatment improves outcomes. These symptoms and signs set out below may indicate serious illness. These symptoms and signs are common to many conditions and it is their combination that alerts health professionals to the possibility of serious illness and prompts further investigation and treatment. The more signs and symptoms in combination, the higher the risk that the underlying problem is a serious illness. Perhaps the most important indicator is that the person with a serious illness feels “not right” or say they might feel they are “going to die”.⁹ This is even more significant if the people that know this person have noticed a change in their behaviour.⁶

3.1 | Red Flags for serious illness.

The more red flags present, the greater the concern that the person is seriously ill.

The bulk of the evidence related to serious illness in adults is from in-hospital studies, so the indicators of serious illness in adults are extrapolated from that evidence. The indicators of serious illness in adults include:⁸⁻¹³

- rapid breathing (breathing rate ≥ 22 / minute) is the most reliable indicator of serious illness in adults
- breathlessness or feeling short of breath
- restlessness, agitation, dizziness, decreased level of consciousness, confusion, slurred speech or disorientation
- shivering or shaking, fever or feeling very cold
- unexplained muscle pain or discomfort
- passing little or no urine
- rapid heart rate
- nausea and or vomiting
- new rash or blotchy, pale, or discoloured (often described as mottled) skin;
- person may say they 'don't feel right' or they might say they feel like they 'are going to die'.

3.2 | Serious illness in children and infants

Children and infants with serious illness can deteriorate quickly. Symptoms and signs of serious illness in infants and children may include:¹⁴

- rapid breathing, weak cry or grunting
- hard to wake, lethargic or floppy
- seizure or fits
- a rash that doesn't fade when pressed
- discoloured, mottled, very pale or bluish skin
- fever, feeling cold or cold to touch
- vomiting repeatedly
- not passing urine (or no wet nappy) for several hours
- not feeding or drinking.

Children often cannot express how they feel so look for the combination of an infection with any of the signs and symptoms listed.

In children, parental concern that this illness is more severe or different and care providers thinking "something is wrong" are predictive of the presence of sepsis.⁵

4.0 | Management

Serious illness is a medical emergency and typically requires in-hospital management and the prompt administration of medications or an operation which targets the infection or other illness.

Send for an ambulance if:

- you suspect sepsis or other serious illness;
- an infection related illness is not improving;
- carer is concerned that this illness is more severe or different;
- care providers (including first aiders) think “something is wrong”.

4.1 | Those that are unresponsive, unconscious or fitting

Send for an ambulance.

- if the person is unresponsive and not breathing normally, commence resuscitation following the Basic Life Support Flowchart [Refer to ANZCOR Guideline 8];
- if the person is unconscious but breathing, lie them on their side, ensure the airway is clear [Refer to [ANZCOR Guideline 3](#)] and keep them under observation;
- if the person is having a seizure, lie them on their side, ensure the airway is clear [Refer to [ANZCOR Guideline 3](#) and [Guideline 9.2.4](#)] and keep them under observation;
- administer oxygen only if there are obvious signs of shock or evidence of low oxygen saturation according to use of Oxygen in Emergencies [Refer to [ANZCOR Guideline 9.2.10](#)].

4.2 | Those that are conscious

Send for an ambulance.

- lie the person down if comfortable lying down;
- treat shock if present [Refer to [ANZCOR Guideline 9.2.3](#)], but do not cover with a blanket if the person already feels hot to touch;
- consider administering oxygen if indicated as per [ANZCOR Guideline 9.2.10](#);
- reassure and constantly re-check the person’s condition for any change.

References

1. Melanie K Prusakowski MD and Audrey P Chen PNP (2017). “Pediatric Sepsis.” Emergency Medicine Clinics of North America Volume 35, Issue 1, February 2017, Pages 123-138
2. Fernando SM, Reardon PM, Mclsaac DI, et al. (2018) Outcomes of older hospitalized

patients requiring rapid response team activation for acute deterioration. *Critical Care Medicine* 2018; **46**(12): 1953-60.

3. Considine J, Street M, Hutchinson AM, et al. (2020) Vital sign abnormalities as predictors of clinical deterioration in subacute care patients: a prospective case-time-control study. *International Journal of Nursing Studies* 2020; **108**: 103612.
4. Jayasundera, R., Neilly, M., Smith, T. O., & Myint, P. K. (2018). Are early warning scores useful predictors for mortality and morbidity in hospitalised acutely unwell older patients? A systematic review. *Journal of clinical medicine*, 7(10), 309.
5. Harley A, Latour JM, Schlapbach LJ. (2019) The Role of Parental Concerns in the Recognition of Sepsis in Children: A Literature Review. *Front Pediatr*. 2019;7:161.
6. Kumar A, Roberts D, Wood KE, Light B, Parrillo JE, Sharma S et al. (2006) Duration of hypotension before initiation of effective antimicrobial therapy is the critical determinant of survival in human septic shock. *Crit Care Med* 2006;34:1589-96.
7. Fenella J. Gill, Gavin D. Leslie, Andrea P. Marshall, (2016) The Impact of Implementation of Family- Initiated Escalation of Care for the Deteriorating Patient in Hospital: A Systematic Review . *Worldviews on Evidence-Based Nursing*, 2016; 13:4, 303-313.
8. Knight, C. and L. Glennie (2010). "Early recognition of meningitis and septicaemia." *The journal of family health care* **20**(1): 6-8.
9. Olander A, Andersson H, Sundler AJ, Bremer A, Ljungström L, Hagiwara MA. Prehospital characteristics among patients with sepsis: a comparison between patients with or without adverse outcome. *BMC emergency medicine*. 2019 Dec;19(1):1-8.
10. Singer M, Deutschman CS, Seymour CW, et al. The third international consensus definitions for sepsis and septic shock (sepsis-3). (2016) *Journal Of The American Medical Association*. 2016;315(8):801-810.
11. Cretikos M, Chen J, Hillman K, Bellomo R, Finfer S, Flabouris A. (2007) The objective medical emergency team activation criteria: a case-control study. 2007;73(1):62-72.
12. Burrell AR, McLaws M-L, Fullick M, Sullivan RB, Sindhusake D. (2016) SEPSIS KILLS: early intervention saves lives. *Med J Aust*. 2016;204(1):1.e1 - 1.e7.
13. Bleyer AJ, Vidya S, Russell GB, et al. (2011) Longitudinal analysis of one million vital signs in patients in an academic medical center. 2011;82(11):1387-1392.
14. Van den Bruel A, Haj-Hassan T, Thompson M, Buntinx F, Mant D, European Research Network on Recognising Serious Infection investigators. Diagnostic value of clinical features at presentation to identify serious infection in children in developed countries: a systematic review. *The Lancet*. 2010 Mar 6;375(9717):834-45.

About this Guideline

Search date/s	November 2019
Question/PICO:	In adults, children and infants [P], is there any reliable method of recognizing sepsis available to a first aider in out of hospital setting?
Method:	Scoping review
Primary reviewers:	Jason Bendall, Finlay Macneil, Natalie Hood, Hugh Grantham

Other consultation	Australian Sepsis Network
Approved:	April 2021
Guidelines superseded:	N/A – new guideline

Referencing this guideline

When citing the ANZCOR Guidelines we recommend:

ANZCOR, 2025, Guideline 9.2.12 – Recognition and First Aid Management of the Seriously Ill person including Sepsis, accessed 19 April 2025,
<https://www.anzcor.org/home/new-guideline-page-2/guideline-9-2-12-recognition-and-first-aid-management-of-the-seriously-ill-person-including-sepsis/>