

Sepsis in the dentist's chair: early recognition saves lives

Understanding sepsis

Sepsis is an acute, life-threatening condition that happens when the body's immune system has an extreme response to an infection, damaging the tissues and organs. It sounds scary, and so it should.

Sepsis is always a medical emergency and 1 in 5 cases lead to death.

Critically, for every hour that treatment is delayed, the chance of death increases by more than 8%.

Sepsis is not rare, and it is not confined to hospitals. In fact 80% of cases start in our community.

In Aotearoa New Zealand, tens of thousands of people develop sepsis each year, and dental and oral infections are one of the causes.

When a dental infection becomes dangerous

For dentists, early recognition can be lifesaving.

Untreated dental decay, periodontal disease, and oral abscesses can allow bacteria to enter systemic circulation, triggering overwhelming infection and, in some cases, sepsis.

Odontogenic infections can spread rapidly beyond the oral cavity. Periapical abscesses, periodontal infections, pericoronitis and post-extraction infections may extend into deep neck spaces, the bloodstream and beyond.

Sepsis occurs when the body's response to infection becomes dysregulated, leading to organ dysfunction. Deterioration can happen quickly — sometimes within hours.

Red flags that should raise alarm

Local infection plus systemic features should always prompt concern. Watch for:

- Fever or hypothermia
- Tachycardia or rapid breathing
- Rigors or profound malaise
- New confusion, dizziness or collapse
- Reduced urine output
- Rapidly spreading facial or neck swelling
- Trismus with systemic symptoms



by **Ally Hossain**
Sepsis Trust NZ





Feature

Pharmacy

Pain disproportionate to clinical findings

If a patient looks sicker than expected, or something just seems off, trust your clinical instinct and seek urgent medical attention, asking if it could be sepsis.

Patients at higher risk

Some people deteriorate faster and should be escalated earlier, including those who are:

- Immunocompromised
- Living with diabetes, kidney disease, cancer or liver disease
- Older adults
- Pregnant or recently postpartum
- Māori and Pacific peoples, who experience higher rates of sepsis and poorer outcomes

Antibiotics are not enough

Sepsis is a medical emergency. Prescribing antibiotics without urgent medical review can delay definitive care.

If sepsis is suspected:

- Act immediately
- Arrange urgent hospital assessment or call emergency services
- Clearly communicate “possible sepsis from dental infection” or ask them to rule out sepsis. Using the term ‘sepsis’ encourages the attending clinician to put the patient on a sepsis pathway, significantly expediting their assessment.
- Early treatment saves lives.

You have an important role to play

Dentists are often the first clinicians to assess oral infections. This places you in a critical position to:

- Recognise early signs of sepsis
- Escalate care without delay
- Educate patients on when symptoms are urgent
- Prevent avoidable deaths

If you suspect sepsis, it is safer to overreact than to miss it.

For further information and resources, visit **Sepsis Trust NZ** www.sepsis.org.nz

"If a patient looks sicker than expected, or something just seems off, trust your clinical instinct and seek urgent medical attention, asking if it could be sepsis."

Be a SEPSIS Superhero
Suspect it
Say it
Stop it.

Know the Signs of Sepsis

Unmask SEPSIS - Save a Life

Sepsis is a life-threatening condition that arises when the body's response to an infection injures its own tissues and organs.



RAPID BREATHING
or **HEART RATE**



CONFUSION,
SLURRED SPEECH or
DISORIENTATION



FEVER or
SHIVERING



MUSCLE PAIN



NOT PASSING URINE



DISCOLOURED SKIN



If ANY of the signs are present, treat it as a medical emergency - call 111 and ask: **"Could it be SEPSIS?"**



Scan this QR Code to learn more about Sepsis.

www.sepsis.org.nz

BIOGRAPHY

Ally Hossain | Sepsis Trust NZ

Ally Hossain is the Chief Executive of Sepsis Trust New Zealand, where she leads national efforts to improve awareness, early recognition, and equitable outcomes for people affected by sepsis across Aotearoa New Zealand. Ally is a communications & community engagement specialist, bringing more than 25 years of experience to the role. She brings firsthand experience to the role after her son developed sepsis in 2024, giving her a unique perspective that bridges lived experience and system-level change. Ally collaborates with clinicians, policymakers, and communities to strengthen public understanding, promote early escalation, and support safer clinical practice. She is a compelling speaker on early recognition, cognitive bias in acute care, and the importance of listening carefully to both physiology and families. Through advocacy, education, and partnership, Ally is committed to ensuring sepsis is recognised earlier and treated without delay. Ally was elected to the Board of the Global Sepsis Alliance in 2025.

