



ALERT FOR CLINICIANS

Increase in invasive group A streptococcus (iGAS) infection notifications

KEY POINTS

- An increase in invasive group A streptococcus (iGAS) infection notifications has been observed internationally, in the Eastern states, and recently in Western Australia (WA).
- Clinicians should be alert for signs and symptoms of iGAS infection.
- Clinicians should promptly manage suspected iGAS infections, refer patients with suspected invasive disease for emergency care and seek advice from an infectious disease physician or clinical microbiologist, when warranted.

Background

- Common non-invasive Group A streptococcus (GAS; *Streptococcus pyogenes*) infections include pharyngitis, impetigo and scarlet fever.
- iGAS infections include bacteraemia, sepsis, streptococcal toxic shock syndrome, necrotising fasciitis, myositis, pneumonia, meningitis, bone/joint infections, puerperal sepsis.
- Increases in iGAS infections have been reported in New South Wales, Victoria, the United Kingdom and some European countries, particularly in children, and possibly in the US.
- An increase in iGAS infections has been observed in WA, with 29 and 31 cases in November and December 2022, respectively, compared to the January to October 2022 average of 17 cases per month (range 14 – 21). The increased infections are primarily in non-Aboriginal older adults, followed by non-Aboriginal children, and 30-49 year olds. iGAS was made notifiable in August 2021 in WA; trend data needs to be interpreted with caution.

Clinical presentation

- iGAS presentations vary depending on site and severity of infection and may include:
 - Fevers and/or chills
 - Shortness of breath and/or chest pain
 - Red, warm, painful and rapidly spreading skin infections which may have pus or ulcerations
 - Clinical picture of sepsis or shock, including multi-organ failure
 - Nausea, vomiting, abdominal pain
 - Dizziness, headache and/or neck stiffness
 - Puerperal sepsis may present as vaginal bleeding or purulent discharge. Evaluate mother and infant pairs.
- In children, signs and symptoms of iGAS infection can be non-specific but can include fever, rash (including scarlet fever rash), cold or mottled limbs, headache, abdominal or limb pain, poor feeding, reduced urine output, vomiting, lethargy, seizures, increased work of breathing, and persistent tachycardia.
- iGAS may occur concurrently with, or following, a viral infection.

Management

- Clinicians should consider iGAS infection in patients presenting with the above clinical picture, assess promptly and initiate appropriate treatment. Treatment guidelines are available at: [Therapeutic Guidelines: Antibiotic \(https://www.tg.org.au/\)](https://www.tg.org.au/).
- Seek management advice from an infectious disease physician or clinical microbiologist as required.
- Patients with suspected iGAS infection should be urgently referred or transferred to an Emergency Department, with clear communication of concerns about potential sepsis.
- Advise patients or their carers to urgently seek care or re-present to an Emergency Department if symptoms progress rapidly or worsen.
- Notify confirmed iGAS infection cases to the local public health unit.

Dr Jelena Maticovic

A/DIRECTOR, COMMUNICABLE DISEASE CONTROL DIRECTORATE

Access Clinician Alerts online at: https://ww2.health.wa.gov.au/Articles/F_I/Health-alerts-infectious-diseases