Government of **Western Australia**
Department of **Health**
Communicable Disease Control Directorate

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ALERT FOR WA CLINICIANS

Vaccine-derived poliovirus detection in Perth wastewater

KEY POINTS

- Circulating vaccine-derived poliovirus type 2 (cVDPV2) has been detected in wastewater from a Perth wastewater catchment sample collected on 13 April 2026 as part of routine wastewater surveillance.
- No human cases of poliomyelitis have been detected in Western Australia.
- cVDPV2 has potential to transmit and cause polio in communities with low vaccination coverage.
- The risk of poliovirus to the WA population following this detection is **very low**.
- **Consider polio** in patients who present with acute flaccid paralysis (AFP) or aseptic meningitis.
- **Check poliovirus vaccine records** where available and **offer vaccine** to under-vaccinated patients.

Current situation

- Poliomyelitis (polio) is a highly infectious viral disease spread mainly through faecal-oral route, with illness ranging from asymptomatic infection to paralytic disease and death.
- Australia has been polio free since 2000 and uses the inactivated polio vaccine (IPV) for routine immunisation.
- Some countries where wild poliovirus is endemic use the oral polio vaccine (OPV) that contains live, attenuated poliovirus. OPV can circulate for prolonged periods in under-immunised populations and mutate to become virulent (circulating vaccine-derived poliovirus or cVDPV). This was most common with OPV2, leading to its withdrawal in 2016, yet cVDPV2 continues to circulate in some countries.
- Wastewater surveillance can detect asymptomatic or mild poliovirus before clinical cases arise. This environmental detection is most likely from an overseas traveller. While there is no evidence of community transmission and the risk to the WA population is very low, vigilance for clinical cases of polio is required.

Signs and symptoms

- In up to 90% of cases, poliomyelitis infection is asymptomatic or results in mild, non-specific symptoms.
- Symptomatic cases may present with fever, gastrointestinal disturbance (nausea, vomiting), or aseptic meningitis (malaise, headache, neck and back stiffness).
- Most cases recover; however, a small proportion progress to paralytic poliomyelitis including AFP.
- AFP is characterised by rapid onset of paralysis in one or more limbs (usually lower limbs) which may spread to involve other muscle groups, including muscles of respiratory and swallowing.
- Paralytic poliomyelitis has a case fatality rate of approximately 2-5% in children and 15-30% of adults.

Testing advice

- Suspect polio in any presentations of AFP or aseptic meningitis. Discuss with an infectious disease physician or clinical microbiologist. Investigations may include cerebrospinal fluid, throat and stool samples for enterovirus PCR testing. There is no serology test to diagnose polio.

Vaccination

- Vaccination is the only way to protect against polio.
- The IPV is safe, highly effective and free for those under 20 years old and humanitarian entrants of any age.
- Check poliovirus vaccination status of patients, where records are available, and offer vaccine, if indicated.
- Children under 10 years of age should receive a total of 4 doses, given at least 4 weeks apart. If the third dose is given at older than 4 years of age, then only 3 total doses are required.
- Children aged 10 years and older require a total of 3 doses, with a minimum interval of 4 weeks between each dose.
- For more information see the Australian Immunisation Handbook recommendations.

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