## **Stengthening Polio Surveillance in Ireland, 2023**

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## **Body of Abstract**

Polio remains a public health emergency of international concern, and represents a significant health security challenge as re-introductions of both wild and vaccine-derived poliovirus (PV) have been observed in nations free from indigenous disease. Robust surveillance and vaccination systems are necessary to facilitate rapid identification and containment of PV, to prevent spread to vulnerable groups, particularly those with inadequate immunisation.

Polio surveillance in Ireland has traditionally relied on clinical acute flaccid paralysis (AFP) notifications. This system has, however, been largely unsuccessful in reaching WHO standards, and thus remains insensitive to effective PV detection.

A NHPSI/HPSC working group undertook to improve effectiveness of polio surveillance.

Lack of physician experience with polio, and awareness of AFP surveillance, were identified as a barriers to reporting. PV wastewater surveillance was considered an important epidemiological strategy to embellish the public health response.

An awareness campaign to improve reporting was undertaken; consultation with paediatric and adult neurology services, including hospital visits and presentations were conducted, and infographic posters were developed. Wastewater surveillance was introduced, and the HSE National Polio Preparedness and Response Plan was revised and published.

2023 AFP notification rates indicate improved reporting on previous years, although remain below WHO standards. No environmental surveillance detections have been reported.

Further efforts are needed to enhance polio surveillance. Exercises to this effect are planned and include a national database review of hospital discharges to identify missed AFP notifications. Further education and ongoing engagement between public health and clinical medicine are likely necessary to improve polio surveillance.