Dear colleague,

Re: Enhanced surveillance of polio and non-polio enteroviruses and acute flaccid paralysis/myelitis

In October 2018, there was a noted increase in reports of unexplained acute neurological symptom presentations, particularly Acute Flaccid Paralysis (AFP) and Acute Flaccid Myelitis (AFM). Since the beginning of 2018, 70 suspected AFP cases have been reported in the UK (49 in 2018, 18 in 2019, 1 in 2020 and 2 in 2021). Cases were reported throughout the UK with a median age of 6.5 years. All reported cases were investigated to exclude polio and identify other potential infectious causes, including non-polio enteroviral infection. Enterovirus D68 was detected in eleven of the reported cases, primarily from respiratory samples. Increases in AFP/AFM linked to enterovirus infection have also been reported in Europe and the USA.

Enterovirus epidemics are seasonal and peak every two years, therefore increased activity was expected in 2020/21. The start of the COVID-19 pandemic and the public health response in early 2020 resulted in very different social mixing patterns and the interruption of circulation of many common viruses. It is expected that as restrictions are eased, we may observe a rebound of enterovirus infections with the risk of an increased number of AFP/AFM presentations during the 2021/22 winter season.

Health professionals are strongly encouraged to report cases as part of national surveillance for polio. This is a World Health Organization requirement to demonstrate that the UK continues to be free of wild poliovirus infection. Any patient presenting with acute flaccid paralysis, should:

i. be reported by calling the UKHSA national duty doctor line on 020 8200 4400 (9am to 5.30 pm 7 days a week)

ii. have the following samples collected and sent to the UKHSA Virus Reference Department for poliovirus isolation and further characterization:
   a. throat swabs / naso-pharangyeal aspirate (NPA)
   b. two stool samples 48 hours apart
   c. cerebro-spinal fluid (CSF) (if collected) and

iii. have an enhanced surveillance questionnaire completed by their responsible clinician. This captures relevant clinical and epidemiological data for review by a clinical expert panel.

Appropriate, timely and comprehensive sample collection is an important part of the investigation of cases of AFP/AFM, with a much higher chance of detecting a viral infection if sampling is done as close as possible to illness onset.

The following guidance/documents are available [here](#):

- How to report cases of acute flaccid paralysis/ acute flaccid myelitis (including advice on samples to be collected and submitted for investigation)
- Information for management of case patients (including infection control advice)
• Surveillance forms for prospective and retrospective notification (and a link to online select survey form)
• Information for patients

Characterisation of circulating enteroviruses is an essential component of enhanced polio surveillance. Current sample referral levels are low and coverage may not be representative of the present burden of enteroviruses. Local laboratories should refer all local enterovirus positive samples to the Enteric Virus Unit (EVU). This enables UKHSA to monitor the diversity of current strains and aid detection of novel strains which can be linked to severe clinical syndromes.

For UK clinicians outside of England, similar reporting schemes are also being established in Wales, Scotland and Northern Ireland. Please report:

• Cases of AFP/AFM in Wales to the all Wales Health Protection Team on 0300 00 300 32.
• Cases of AFP/AFM in Scotland to Public Health Scotland on 0141 300 1422 or phs.flu@phs.scot.
• Cases of AFP/AFM in Northern Ireland to the Health Protection Duty room, Public Health Agency, 4th Floor 12–22 Linenhall Street, Belfast, BT2 8BS. Tel: 0300 55 501 19, Fax 028 95363947, Email: pha.dutyroom@hscni.net

Thank you for your assistance in this important work.

Yours sincerely,

Dr Mary Ramsay
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