

Suspected neurological complications in confirmed case (or cases) of COVID-19 infection

Investigators

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To report a case [click here](#) or report via the monthly BPNSU email

Purpose

We are looking to collate the serious and rare neurological complication of COVID-19.

The COVID-19 pandemic is an evolving national emergency in which a significant proportion of the population are expected to be infected. The experience of past pandemics, notably influenza subtype H1N1 in 1918 and 2009, suggests that neurological complications may occur. Though the proportion may be small, given the large number of infections the collective burden may be large.

Case definition

- Children age <18 years.
- History of laboratory-confirmed of COVID-19 infection, or suspected infection, irrespective of clinical signs and symptoms
- New-onset neurological disorder, occurring contemporaneously or following COVID-19 infection.
- COVID-19 infection implicated as possible cause of neurological disorder by a paediatric neurologist.

Methods

The reporting paediatric neurologist will be sent a short case reporting form. Given the unprecedented strain the NHS is currently facing, this form has been kept purposely brief so as not to add to the workload of busy clinicians and staff-depleted teams, and is essentially a screening document. A minimum of information required to later identify the patient is requested, encrypted via a scrambling algorithm. Since no openly identifiable information is shared, consent is not required at this point. A similar strategy is already in use by the UK Renal Registry, for example.

At a later point, the local clinical research team linked to the reporting paediatric neurologist may be contacted and asked to either consent the patient or obtain assent from their significant other, using approved forms supplied by the central study team. Once consented, clinical details such as demographics, past medical history, symptoms, signs, test results, treatment, and progress will be gathered from the reporting neurologist or their team using a standardised case report form.

We have also partnered with the ABN to identify cases over the age of 18y, the BNPA to identify neuropsychiatric complications, BASP to ensure we are notified of acute cerebrovascular presentations, and NACCS so that people primarily managed by neuro-intensivists are reported.