

## A short note on the role of children in transmission of SARS-CoV-2

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Data from population-based swabbing and serological data have very recently become available which suggests that children – particularly older children – may play a more significant role in transmission than was previously thought. Much of these data have only become publicly available since the SAGE meeting on 15<sup>th</sup> of October when this issue was discussed.

The data consist of population-based serological data (summarised in [1]) and population based swabbing data, i.e. the ONS Coronavirus Infection Survey [2 and 3] and the REACT1 study [4].

### Serological data

The PHE Serological Surveillance Summary, summarises data from May to September 22<sup>nd</sup> on the levels of seroprevalence. Given the lag of 2-3 weeks between infection and development of high antibody titres, the data reflect levels of seroprevalence observed during the first wave, when schools were largely closed. As Figure 1 shows (Figure 7 in report), the levels of seroprevalence in children (0-17 years age) is similar to that observed for adults (around 12% seropositive in London, much lower seroprevalence in the South West, and other regions with 3-6% seroprevalence). This is evidence that children were infected to a similar extent as adults in the first wave, despite the schools being closed for much of it.

Figure 1: Seroprevalence in children by region

Figure 7: Population weighted % positive / indeterminate using the Abbott assay by NHS region in SEU/Paediatric collections, ages 0-17, 1 May - 22 Sept 2020

