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the rash has cleared, and for contacts of a confirmed case to isolate for 21 days after exposure.

Rapid point-of-care diagnostics will be an important tool for controlling the spread of infection. Here, we report the characteristics of a prototype lateral flow assay that uses a cocktail of four monoclonal antibodies specific for Old World orthopoxviruses.<sup>3</sup> The monoclonal antibodies do not recognise New World orthopoxviruses or members of the *Parapoxvirus*, *Leporipoxvirus*, or *Suipoxvirus* genera.<sup>3</sup>

Few lateral flow assays were available for preliminary testing using sucrose gradient-purified Modified Vaccinia Ankara in assay sample buffer. Initial titration established a sensitivity limit of between 10<sup>4.5</sup> and 10<sup>5</sup> plaque-forming units (appendix p 1). Testing conducted in clinical sample buffer, taken from a standard COVID-19 rapid test kit (BBI Solutions, Crumlin, UK), showed the same sensitivity limit. Testing in human saliva resulted in approximately 1 log reduction in sensitivity. However, if saliva was diluted 1:4 (v/v) in clinical sample buffer the reduction in sensitivity was around 0.5 log. Considering the high concentration of monkeypox virus and the antigen expected on skin and in oral lesions, the sensitivity limit of this assay should be applicable to virus detection in a clinical setting.

Our data show the potential of this lateral flow assay for rapid sensitive detection of *Orthopoxvirus*, which needs to be urgently confirmed with clinical samples from patients with monkeypox. Vaccinia and cowpox viruses are associated with the *Orthopoxvirus* genus known to infect humans. However, these infections are very rare and have a different clinical presentation to monkeypox. Consequently, by corroborating with clinical presentation, the lateral flow assay could provide a powerful point-of-care diagnostic for monkeypox, which will enhance disease control efforts.

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## Is the UK prepared for seasonal influenza in 2022–23 and beyond?

Non-pharmaceutical interventions for COVID-19 have resulted in very low levels of circulating influenza globally. However, now that these pandemic control measures have been abandoned in the UK, the return of influenza as a major public health issue appears inevitable. There has been a rapid rise in influenza A notifications in Australia, which started earlier than usual and as of writing are tracking at record high numbers (figure). These data from Australia help predict what is to come in the northern hemisphere in the winter of 2022–23.

As of June 19, 2022, 85% of influenza cases in Australia were due to influenza A (H3N2),<sup>1</sup> which is known to cause more severe epidemics.<sup>2</sup> The sharp increase in cases was probably

driven by relaxation of measures put in place to mitigate the COVID-19 pandemic and the low proportion of the population vaccinated against influenza. In addition, there has been little natural influenza infection for the past 2 years. As a result, herd immunity against currently circulating viruses is probably substantially lower compared with previous years, a situation exacerbated by the entire cohort of children younger than 2 years who have never been exposed to influenza.

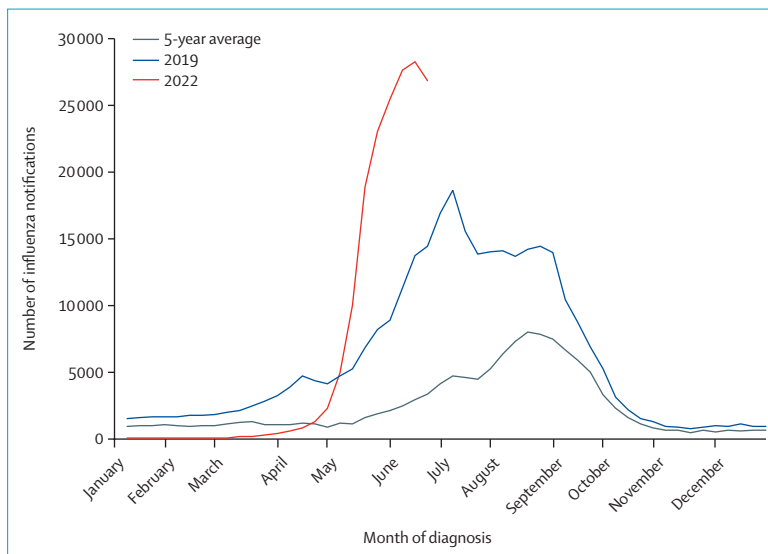
Uptake of the seasonal influenza vaccine has been declining in Australia and the UK, including in those at risk of severe disease, such as pregnant women and children.<sup>3,4</sup> Influenza vaccination rates also dropped in UK health-care workers from 77% in 2020–21 to 61% in 2021–22, when the vaccine was offered concomitantly with the COVID-19 booster.<sup>3</sup> Public attention is focused on COVID-19 and potential autumn booster vaccinations, and safety concerns and mistrust of COVID-19 vaccines might result in enhanced hesitancy towards the influenza vaccine. Barriers to vaccination should be addressed by engaging with communities, including members of minority ethnic groups, and training vaccinators to emphasise the safety and efficacy of coadministering COVID-19 and influenza vaccines.

The measures taken to control the COVID-19 pandemic have created new challenges for managing seasonal influenza. The Australian data provide a warning for an earlier and more severe influenza season in the northern hemisphere. The UK Joint Committee on Vaccination and Immunisation decision to remove those aged 50–64 and 11–15 years from the groups eligible for the 2022–23 influenza vaccine should be reconsidered.<sup>5</sup> Children are responsible for most influenza transmission, as in Australia, where 10–14 year olds currently have one of the highest infection rates.<sup>1</sup>

See Online for appendix



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**Figure: Notifications of laboratory-confirmed influenza in Australia**

The 5-year average is based on notifications from Jan 1, 2017, to June 19, 2022. The figure was adapted from the Australian Government Department of Health and Aged Care.<sup>1</sup>

Therefore, vaccinating children aged 11–15 years is particularly important. However, for this to be effective, vaccine campaigns should start early and disparities in the vaccination of groups at high risk of infection (eg, health-care workers and children) must be addressed.

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