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## **Influenza vaccination uptake in our most vulnerable groups: how well are we protecting them in 2019?**

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## letter to the editor

# Influenza vaccination uptake in our most vulnerable groups: how well are we protecting them in 2019?

Frank Beard, Alexandra Hendry, Kristine Macartney

Annual influenza vaccination is strongly recommended for children aged 6 months to < 5 years, adults aged  $\geq 65$  years, Indigenous people aged  $\geq 6$  months, and anyone aged  $\geq 6$  months with specified medical conditions.<sup>1</sup> We previously reported a fivefold increase in influenza vaccine uptake in children aged 6 months to < 5 years, from 5.0% in 2017 to 25.6% in 2018,<sup>2</sup> in the context of new state/territory-funded programs. We aimed to review whether uptake improved in 2019, and to report the first national influenza vaccine uptake estimates in older adults ( $\geq 65$  years of age) from the 'whole-of-life' Australian Immunisation Register (AIR) established in late 2016. Previously published adult uptake data have been limited to sporadic surveys based on self-report.<sup>3</sup>

With Australian Government Health Department approval, we analysed de-identified AIR data as at 30 September 2019. Influenza vaccine uptake estimates were calculated weekly for 1 March to 31 August 2019, by age and Indigenous status (Figure 1).

Between March and August 2019, a total of 568,510 (39.7%) children aged 6 months to < 5 years had  $\geq 1$  dose of influenza vaccine recorded on the AIR, up from 25.6% in 2018.<sup>2</sup> Uptake varied by age subgroup, highest in the youngest (6 months to < 1 year; 56.7%) and lowest in the oldest (3 to < 5 years; 35.6%). Uptake was similar in Indigenous and non-Indigenous children (39.9% versus 39.7%).

Analysis of AIR adult vaccination data showed recorded influenza vaccine uptake was 58.0% for adults aged  $\geq 65$  years in 2019. As anticipated, this was lower than that reported in the

most recent (2014) national survey (73%),<sup>3</sup> and in test-negative controls from the Influenza Complications Alert Network (FluCAN) sentinel hospital-based surveillance program in 2018 (77%),<sup>4</sup> but higher than initial years of the AIR where recorded uptake in this age group was 31.5% (2017) and 46.3% (2018),<sup>5</sup> demonstrating improved completeness of reporting over time. However, true coverage is certainly higher, based on knowledge of vaccine doses distributed, emphasising the importance of continuing efforts to encourage reporting to the AIR.

In contrast, recorded uptake in Indigenous adults aged  $\geq 65$  years was 75.1%, very similar to the 74% reported in the most recent (2012/2013) National Aboriginal and Torres Strait Islander Health Survey.<sup>6</sup> Recorded uptake in 2019 for Indigenous people in the 15 to < 50 and 50 to < 65 year age groups was lower (28.9% and 52.0%, respectively, data not shown), but also consistent with 2012/2013 survey findings.<sup>6</sup>

The different vaccination patterns observed are also noteworthy, commencing and peaking several weeks earlier in adults aged  $\geq 65$  years than in young children. This may be due to early rollout and prioritisation following the early onset of influenza activity in 2019. The steeper uptake from June to August in children aged 6 to < 12 months likely reflects children reaching 6 months of age throughout the season, and the routine scheduled visit for other vaccines at this milestone. These data can help inform program and immunisation provider service delivery.

In conclusion, uptake of influenza vaccine in young children continues to increase, driven by state/territory-funded universal influenza

vaccination programs. Funding for this age group under the NIP, commencing 2020, should underpin further improvement. AIR data underestimate true adult influenza vaccine uptake, although data completeness has improved substantially. We advocate that:

1. Clinicians and public health programs continue to enhance strategies to increase influenza vaccination for all at-risk individuals as recommended, and
2. Immunisation providers, including those in primary care, vaccinating pharmacists and workplace and hospital-based providers, report *all* vaccinations, including influenza, to the AIR, so that individual and population-level data can inform both clinical management and public health policy and practice.

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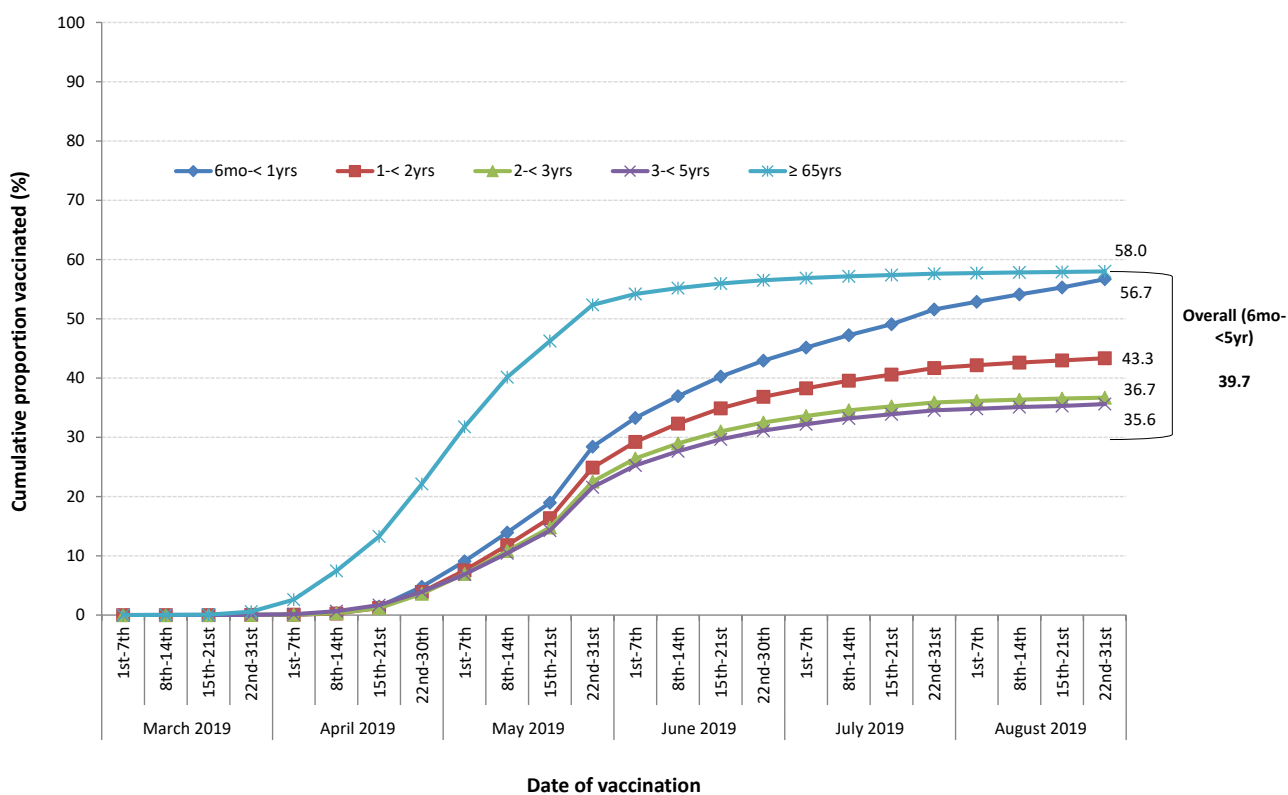
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Figure 1. Cumulative influenza vaccine uptake ( $\geq 1$  dose) by age group, all Australians (A) and Indigenous Australians (B), 1 March to 31 August 2019

A)



B)

