## PARLIAMENTARY INQUIRY QUESTION ON NOTICE

# **Department of Health**

## Senate Select Committee on COVID-19

### Inquiry into Australian Government's response to the COVID-19 pandemic

## Written Question on Notice, 29 January 2021

PDR Number: IQ21-000004

Mix of vaccine for herd immunity

Written

Senator: Rachel Siewert

#### **Question:**

What levels of herd immunity will be achieved under the mixed Pfizer/AstraZeneca rollout?

#### Answer:

- Herd immunity occurs when a large portion of a community becomes immune to an infectious disease, either through vaccination or prior infection. This means that spread of the disease from person to person is unlikely, and leads to the whole community becoming protected.
- As Australia has low levels of COVID-19 infections in the community, achieving herd immunity will depend on the proportion of the population vaccinated and also on the efficacy of the vaccine.
- The clinical trials for the Pfizer and AstraZeneca COVID-19 vaccines assessed how effective the vaccines were at preventing symptomatic infection with the virus that causes COVID-19, including the impact on the rate of severe COVID-19. The clinical trials did not assess whether the vaccines reduced transmission of the virus that causes COVID-19 nor whether they prevented asymptomatic COVID-19 infection.
- There is currently limited information on prevention of transmission of the COVID-19 virus by any of the available vaccines, including Pfizer or AstraZeneca.
- As more detailed information on the prevention of transmission and duration of the vaccine effects become available, we will be in a better position to make predictions about future herd immunity.
- At this stage, there is insufficient data to determine at what level the vaccines will limit community transmission to support the long term goal of herd immunity.