



## 2021 Infection Prevention & Control for General Practice

### May 2021 e – newsletter # 3 – Why we knew there was a high risk of an outbreak – never if and when, just where?

From early May

James McCaw, an epidemiologist and mathematical biologist with the University of Melbourne who is leading a research team providing modelling on the pandemic to the federal government, said it was “*absolutely inevitable*” that the virus would spread within Australia. “*The risk of a disastrous coronavirus outbreak in Australia is now at its highest level since the pandemic began and continued escapes from quarantine can be expected at least every month*”.

Today and why, why now?

1. Largely non immune population (as of end of May less than 20% of adults have had even one dose) means that transmission would be widespread.
2. Increasingly transmissible variants e.g the current Indian variant has an RO of 6 (not necessarily more serious, more transmissible) compared with the Wuhan strain of approx. 2.4 meaning that transmission would be rapid.
3. Until two weeks ago, increasing number of positives in quarantine (we can manage 2% but was 13% late April)
4. Incubation period is shortening, with the first wave Wuhan strain it was 5-6 days which gave contact tracers 3-4 days to identify a contact and isolate them before they became infectious. Now the incubation period e.g. from the main the Indian variant (with 13 mutations) can be one day, meaning that with some cases, even if the contact tracers reach them in 2 days or even less, some have already become infectious with potential to transmit. Hence a ring around close contacts, their contacts and contacts of theirs and restricting movement.
5. Risk that the vaccine (currently against the Wuhan strain) will become less effective as more variants arise.

You cannot choose a number of cases to implement precautions or restrictions – the virus does not behave like that (1 case is 100 before you know it). You take strong action when you have a community transmission case so you can stop onward transmission and trace unlinked cases. Doing it too late means potential for collapse of a health system coping with large numbers in a non immune population – that is us right now.

Inform colleagues and patients that

1. Because the vaccine is not 100% effective, when visiting or working in healthcare, we all wear masks to protect ourselves and vulnerable others until this is over or we have herd immunity through mass vaccination
2. Many vulnerable pts will not have a great response to their vaccine so we continue to protect them and us
3. The current outbreak in vic is due to one of the much more highly transmissible Indian variants so we are dealing with a different set of conditions altogether to last year.
4. All vaccines have side effects but be aware of them and make an informed decision for you and our community.

Good news

1. The latest data (last week Northern Italy study) shows that if you have developed protective immunity from the vaccine then there is less than a 3% chance you will be able to transmit ie, no asymptomatic spread. A big relief.
2. The current vaccines to the Wuhan strain are holding well against known current variants of concern (VOC) – while effectiveness may be a bit lower it is still good so far.
3. There are dozens of new vaccines in the pipeline but the best vaccine is the one in your arm! Please lean on parents and friends to protect you as much as you have been vaccinated to protect them

We are in the middle of a global pandemic with most people not immune. While those of you who are fully vaccinated can have a high level of reassurance, it is not 100%. Wearing a mask further reduces risk (side benefit maybe less URTIs)

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