



## **Covid controversies continue to hinder our efforts to end a deadly pandemic – Part 1**

By [JOHN DWYER](#) | On [4 September 2020](#)

*It is truly lamentable that in this most scientific of all ages, so much of the world is making a mess of tackling the worst public health challenge in a hundred years.*

*In this day and age the little monster responsible is not ‘invisible’ as many proclaim. We can see it with our electron microscopes and have created a minutely detailed three dimensional model of the virus. We understand the devilishly clever mutations it has engineered to penetrate and reproduce in human cells and understand its major vulnerability. It has about two to three weeks to have a host (human) produce zillions of copies of the virus and get as many as possible into a new host before the original host learns how to kill the virus or the virus kills the host! What use is knowledge, however, if you don’t use it?*

*In too many countries but particularly in the United States, which one would have reasonably anticipated would have provided an exemplary evidence-based approach to tackling the epidemic, there has been little respect paid to genuinely expert opinion. This corona virus is fortunate to have entered a human world where ‘fake news’, ‘alternative facts’ and an epidemic of conspiracy theories infesting social media platforms blunt or even negate a science-based approach to control Covid-19. This situation is made worse when political demands decide what facts are acceptable.*

*Just in the past two weeks we have seen dangerous examples of this reality. Despite the contention being subjected to the ridicule it deserves, Trump continues to insist that the reason the US has more infections with the Covid virus than any other country is because they do more testing than anyone else. As his mishandling of the epidemic may be the most likely issue that could see Americans end his presidency, Trump desperately wants the infection rate to fall. Since his policies make that difficult, he wants to hide the reality.*

*How else can you explain the ridiculous and dangerous change of tack from a sadly subservient Centres for Disease Control, which declared that if you had been in close contact with a person known to have developed Covid-19 you need not be tested unless you have symptoms of the disease! Tracing and testing close contacts is an essential strategy if we are to have any hope of diminishing infections.*

*After universal criticism from public health experts, a CDC spokesperson said this was a pragmatic decision because of the huge backlog in tests awaiting completion. Results that are only available a week or so after testing are of no value. An infected individual may have infected dozens of others in that week.*

*At Trump's daily briefing he continually asserts that remarkable progress is being made in the search for a cure. First it was hydroxychloroquine, which does not help and can be dangerous, though you may get a different impression listening to Sky News commentators here. I wonder what Clive Palmer will do with the 32 million tablets he bought? Then there was the anti-viral drug Remdesivir, which may shorten the illness in some but is no cure.*

*Now Trump has announced another 'game changer', Covid convalescent plasma. This is in fact a treatment that could be very beneficial but we don't know that that is so. Around the globe some 70,000 people struggling with Covid-19 have been given intravenous infusions of plasma obtained from people who have recovered from the illness. Plasma is the protein-rich component of blood in which red and white blood cells float as they are whisked around one's body. Blood can be spun in a centrifuge to separate the cells from the plasma.*

*The rationale is simple enough. To help defeat viral infections we produce antibodies that can 'neutralise' (in the CIA sense) viruses. These antibodies are not person specific; the antibodies you and I produce are exactly the same. As it can take days or even weeks to make sufficient antibodies the first time we encounter an infectious agent, it makes sense to use the hard work of someone else's immune system to get on top of our infection. Of course this only works if the convalescent plasma contains potent antibodies.*

*It is troubling that even in highly infected populations, where 40-50% of people have been infected, we are not seeing the whole of community reduction we might expect if 'herd immunity' due to so many people having neutralising antibodies was really hindering the virus in its efforts to find virgin hosts. So while we can reasonably expect to find such antibodies in Covid convalescent plasma we need to prove it.*

*Scientists scrutinising results from the 70,000 or so infusions given did not find data to prove or disprove benefit as the patients involved were given many other treatments in a 'shotgun' rather than controlled scientific approach to investigation. Comparison of the results obtained when cohorts of patients are studied who did or did not receive plasma are under way but it will be some time before we get results and it is very misleading to say a 'game changer' has been identified.*

*Then, last weekend, we had the spectacle of 1500 people crammed into the White House Rose Garden, without practising social distancing and hardly a person wearing a mask, listen to Trump accepting his party's nomination for another four years as President. Trump, who had been cajoled into declaring that wearing a mask during this pandemic was a 'patriotic' thing to do, again revealed his Covid hypocrisy. Justifiable criticism descended on the White House. His ally, Fox News, trotted out 'experts' who falsely and dangerously declared that there was very little risk of being infected in an open air setting. Daughter-in-law Lara Trump, when quizzed about the dangers of the event, said that masks were available but it was really a matter of personal freedom as to whether one wore a mask or not.*

*The outbreak of demonstrations in many countries demanding any lockdowns or compulsory wearing of masks as a violation of personal freedom and as such unacceptable threatens control strategies. Rowdy and large demonstrations have recently occurred in Paris, Berlin and the US. Most communities have accepted the imperative that smoking in public is unacceptable because of the dangers to others from passively inhaling*

*the carcinogens in tobacco smoke. Personal freedom is important but the largesse cannot be unlimited.*

*So here we are, nine months into a pandemic with 25 million of us experiencing an infection with a virus that has killed more than 850,000 and left many thousands who survived with serious, in some cases lifelong, complications. The US has had the worst of it to date closely followed by Brazil, which is unfortunate enough to be led by a Trump clone.*

*How are we doing? By any measure Australia has done a better job than most countries in minimising the infection rate. We had luck on our side as we could see Covid-19 exploding to our north and had more preparation time than did many countries and wisely established 'Fortress Australia'. This pandemic, however, is so entrenched world wise (188 countries at last count) that it is unrealistic to think we can eradicate the virus from the nation while it continues to rage elsewhere.*

*However, any number of countries have discovered that initial success can evaporate quickly when safeguards are breached by human error. While so far spared the catastrophic outcomes in the worst-affected countries, we now know a lot about how rapidly control can be lost because of the dangers of 'exponential growth' as we have recently seen played out in Melbourne.*

*It is threatening to see the cohesion within our inter-governmental task force disintegrating as economic pressures see some governments criticising the Victorian Premier for his totally justifiable 'lock-down'. Once the incidence of new cases defeats any possibility of containment via contact tracing and isolation of the exposed, the only evidence-based strategy for regaining control requires measures that ensure we keep away from each other for long enough to deprive the virus of new hosts.*

*So the message from Melbourne, which so recently seemed to have infection rates under control, is clear. Any success we are experiencing is fragile and can only be protected by avoiding 'restriction fatigue' and the carelessness that that can breed. In so doing the following needs more emphasis.*

*The vast majority of people infected with Covid-19 met the virus while in close physical proximity to an infectious individual for an extended period of time. Prolonged exposure not only results in a much greater chance of being infected, it also makes it likely one will be infected by a lot of virus ('high viral load') which will be a major factor in determining the clinical consequences.*

*Remember our local experience of one infected individual attending a wedding reception with 35 others, all of whom went home infected? Prolonged exposure to Covid carriers results in 'clusters' of infection, as we have seen in meat packing plants, nursing homes, cramped housing estates and, increasingly notable, hospital settings. More than 1200 Australian health professionals caring for Covid patients have been infected. During Italy's Covid crisis, more than 100 previously healthy and often young doctors died because they were constantly exposed to huge numbers of infected individuals over many weeks.*

*As we attempt to tame this epidemic it is crucial that we not only practise social distancing but also focus on minimising occasions when we are close to fellow citizens for a prolonged period of time, a strategy we might call 'Social Brevity'. Religious services, choirs, funerals, parties, hotels where drinking while standing in groups is allowed, public*

*transport and the normal daily routines in nursing homes all create dangerous opportunities for infection. Recent evidence in Sydney of cross infection on a bus emphasises the importance of wearing a mask on public transport. While the possibility of mandates or compulsion immediately sparks opposition from some, it would be entirely reasonable to make compulsory mask wearing while using public transport.*

*Freedom from the social and health consequences of the pandemic will only end with a safe and effective vaccine. Part two will focus on progress in the search for a vaccine*



**John Dwyer**

Professor John Dwyer, Immunologist and Emeritus Professor of Medicine at UNSW