## Mediterranean BioMedical Journals Integrative Journal of Medical Sciences

2020, Volume 7, ID 187 DOI: <u>10.15342/ijms.7.187</u>

### CASE REPORT

# The Increasing Number of Infected in Victoria, Australia since June 15, 2020, is the Result of Over-Testing and Over-Controlling without Safety

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#### **ABSTRACT**

On June 15, the Victorian government was rocketed by a corruption scandal, and the government started the search for more Covid19 cases, by increasing the number of tests per day, and by focusing the testing on the more disadvantaged suburbs of Melbourne, where more cases where expected. By over-testing and then over-controlling, the percentage of positive cases over tested that was initially about constant at everything but worrying values of 0.1 to 0.2%, i.e. 1 to 2 over 1,000, has dramatically increased, by a factor of 10, now approaching 2%. Apart from mass testing knocking doors after doors of single-family homes, one potentially infected family after the other, with entire public buildings looked down, and all the occupants prevented from leaving the building and mass tested, a sample wrong indication is for people feeling sick to reach a hospital possibly moving by public transport within a 5 million people city, to get tested after having queued and then returning home. We predicted since the early days after June 15 that this strategy could have brought to the first real dangerous outbreak of Covid19 in Australia, and this is exactly what they have achieved.

 $\textbf{KEYWORDS:} \ Covid 19; \ Australia; \ Victoria; \ Melbourne; \ hot \ spots; \ positive \ rate.$ 

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#### Covid19 infection worldwide as per June 27, 2020

Covid19 infectivity and fatality are much less than what is pictured by the mainstream media. As summarized in [1] the overall lethality of Covid-19 is about 0.1% and thus in the range of strong seasonal influenza. The simulations of the Covid19 infections [2] driving the world response were flawed by unrealistic assumptions [3]. Opposite to the simulations [2], that reported a peak mortality rate of 210-per-million in the UK and 170 -per million in the US, and duration of the outbreak of almost five months, the peak mortalities measured so far have been much less and achieved much quicker, with peaks at about 13 per million in the UK and less than 10 per million in the US (7 days moving averages), after about 1 month from the outbreak, and the most of the countries worldwide doing much better to contain fatalities<sup>3</sup>.

Belgium is the country with the largest peak daily death rate at about 28-per-million, more than 3 times the value of The Netherlands, that adopted less restrictive measures.

Countries with harsher lockdown such as Belgium or the UK had a larger rather than a smaller peak in the mortality rate of other countries, for example, the Netherlands, or Sweden, that adopted less severe restrictions, after about the same time. Peak mortality rates were also achieved after less than one month in most of the cases <sup>3</sup>.

Most people affected by Covid19 are mild or asymptomatic cases [1]. The infection fatality rate is estimated [4] at between 0.12% and 0.2% slightly more than the fatality rate estimated for the common flu which is 0.096%. Similarly reduced mortality rates are proposed by [5]. Fatalities are slightly above the seasonal flu average in some countries, such as the US, the UK, or Sweden, and well below the seasonal flu average in some other countries, like Germany, Austria, or Switzerland. The risk of death for the general healthy population is extremely low [1],[6]. In the case of the Charles De Gaulle aircraft carrier, for example, of almost 2,000 challenged, 1,081 got infected [7]. But of these 1,081 only 24 ended up in need of hospitalization. No fatality was

recorded after the outbreak was fully resolved in a couple of weeks <sup>[8]</sup>. In the general healthy population, people who do not get infected even if challenged by the Covid19 virus are the majority.

There is growing evidence most of the healthy individuals do not get infected, or are asymptomatic, or are mild cases, and hospitalization is mostly needed only for risk categories of elderly people or people with comorbidities, which are almost the totality of the fatalities  $\[1], \[6], \[9].$  Most of the people infected by Covid19, not only navy personnel, are indeed only mild or asymptomatic [1]. In addition to people with a strong immune system that may not even notice to have been challenged by the virus, many other people may also have a background immunity to Covid19 from previous coronaviruses infection [1]. Age, comorbidities, and risk profile of Covid19 deaths corresponds to normal mortality [1]. Generalized lockdown measures have made so far no difference [9],[10]. In many countries, up to two-thirds of all extra deaths occurred in nursing homes, which do not benefit from a general lockdown  $^{[1],[9],[10]}$ . In many cases, it is not clear whether people for example in nurses' homes died from Covid19 or weeks of extreme stress and isolation [1]. Up to 30% of additional deaths may have been caused by the effects of the lockdown, panic, and fear [1]. Excessive invasive ventilation of Covid19 patients done out of fear of the spreading virus was counterproductive [1]. In many deaths attributed to Covid19, it is not clear whether they died from Covid19, or simply with Covid19. Countries without curfews and contact bans, such as Japan, South Korea, Belarus, or Sweden, have not experienced a more negative course of events than other countries, such as the UK, the US, Italy, or Belgium [1], [9], [10]. Coronaviruses have been around for many years. Covid19 will also be around for some time. Never before in human history, somebody planned the shutdown of the world for the flu. Thus, people will need to learn how to leave with the presence of Covid19 in the background. Vaccines will not remove Covid19 from the background. Testing the many thousands will always return some positive cases for some time. Some precautions in the general population will have last for a long time, without resembling hysteria, but life should be back to nearly normal the sooner the better<sup>9</sup>. It seems reasonable to maintain measures to protect the vulnerable without overreacting to make more damage than the virus itself preventing the healthy population to conduct a nearnormal life. The actual numbers do not justify the panic for Covid19, and mass vaccination and digital ID.

### Covid19 infection in Australia as per June 27, 2020

Australia, of a total population above 25 million, had so far only 104 deaths for Covid19 while the seasonal flu can make more than 3,000 per season, as shown in Table 1 from [11]

The number of likely infected (the swap test has false positive and false negative) over the number of tested for Australia is 0.33%. The percentage of infected over the tested is higher in Tasmania or New South Wales than Victoria, in Table 2 from [11].

Tasmania had so far much larger positive rates at 0.5%, same as the Australian Capital Territory and New South

Wales at 0.4% (Table 2). The average of Victoria is 0.3%, and also the average of the tests of Queensland, Western Australia, and South Australia, with only the mostly desert Northern Territory scoring a 0.2%. From Figure 1, very few countries have lower positive rates.

Across the world, Figure 1 from <sup>[12]</sup>, the rates of infection are generally much higher. In Australia, the number of coronaviruses cases admitted to hospital is negligible, table 3 from <sup>[11]</sup>. The percentage between infected and tested is uniform across Australian and eventually lower in Victoria. The only borders presently open in Australia are those inbetween Victoria, New South Wales, and the Australian Capital Territory.

As per June 27, 2020, Victoria and New South Wales, the most populous states, have a negligible number of 5 infected in hospitals in each state, with only 1 of the 10 in an intensive care unit (ICU), Table 3.

Also for Australia, Table 4, also from [11], about 66 of 104 deaths are people living in Australian Government-subsidised residential aged care facilities (60) and people receiving Australian Government-subsidised care in their own home (6).

**Table 1** – Coronavirus statistics of Australia as per 27 June 2020.

Image from [11].			
Total cases	Total cases recovered		
7,641	6,979		
Total deaths	New cases in last 24 hours		
104	47		
Overseas acquired last 7 days	Locally acquired last 7 days		
59	112		
Tests in last 24 hours	Total tests		
54,222	2,336,061		

The share of daily COVID-19 tests that are positive, Jun 26, 2020

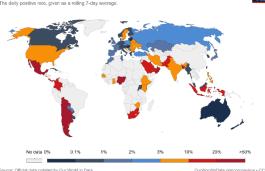


Figure 1 – Positive Covid19 rate measured across the world as per June 26, 2020. Image from [12].

Table 2 – Coronavirus tests by the state of Australia as per 27

June 2020. Image from [11].

Jurisdiction	d	Total tests conducted	Positive tests (%)	
ACT		28,364	0.4%	
NSW		812,427	0.4%	
NT		12,932	0.2%	
бгр		353,085	0.3%	
SA		147,846	0.3%	
TAS		48,239	0.5%	
VIC		758,838	0.3%	
WA		174,330	0.3%	

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Table 3 – Number of COVID19 cases currently admitted to hospital, including cases in ICUs, in Australia and each state and territory. as per 27 June 2020. Image from [11].

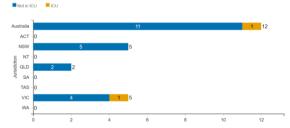
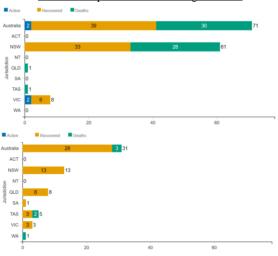


Table 4 – Top, Number of confirmed active COVID19 cases, deaths, and recovered cases, in Australia and each state and territory, for people living in Australian Government-subsidised residential aged care facilities as per 27 June 2020. Bottom, number of confirmed active COVID19 cases, deaths, and recovered cases, in Australia and each state and territory, for people receiving Australian Government-subsidised care in their own home as per 27 June 2020. Image from [11].



With a total number of fatalities stable at 104 in a country of more than 25 million people, when the normal flu may take 3,000 people per year, the epidemiological management of the Covid19 infection after more than 4 months of restrictions resembles an Orwellian dystopia more than a correct epidemiological approach.

# The "hot spots" of Covid19 infection of June 27, 2020, in Victoria. Australia

On June 27, 2020, when return to normality was expected, the Victorian government and the mainstream media claimed the existence of "hot spots" of Covid19 infection in Victoria, Australia. This claim was an artifact of the much larger number of tests conducted in the most disadvantaged suburbs of Melbourne to detect an increased number of cases. The rate of positive cases detected over the number of tests performed to achieve this result was stable at about 0.3%, which is the rate experienced in Victoria since the outbreak in March, despite the focus on the areas where positive higher rates were likely. The restrictions have then been made harsher, rather than more relaxed in this state, and return to normality is now suffering nationwide.

Regarding the tests conducted mostly in Victoria, where for some reason the local state government wants to push the idea of hot spots of Covid19 infection in Melbourne, the positive rate was about the same as what it was before the scandal that rocketed the Victorian Government about June 15, once the focus placed on the more disadvantaged suburbs that may host more cases is factored. The start of the unprecedented mass testing in Victoria was incidentally phased with an investigation about the operation of the government [13],[14],[15],[16],[17]. The Covid19 positive cases quickly replaced every other news in the headline.

- As of June 30, 2020 [18], the total number of coronavirus COVID19 cases in Victoria increased by 64 to 2,159. More than 809,000 tests were processed to date. 64/17,000 is equivalent to 0.38%.
- As of June 29, 2020 [19], the total number of coronavirus COVID19 cases in Victoria increased by 71 to 2,099. More than 792,000 tests were processed to date. 71/16,000 is equivalent to 0.44%.
- As of 28 June 2020 [20], the total number of coronavirus COVID19 cases in Victoria was 2,028 with an increase of 41 since the day before. More than 776,000 tests were processed to date. 41/18,000 is equivalent to 0.22%.
- As of 27 June 2020 [21], the total number of coronavirus COVID19 cases in Victoria was 1,987 with an increase of 41 since the previous day's report.
   More than 758,000 tests were processed to date.
   41/22,000 is equivalent to 0.19%.
- As of 26 June 2020 [22], the total number of coronavirus COVID19 cases in Victoria was 1,947 with an increase of 30 since the previous day's report. More than 736,000 tests were processed to date. 30/20,000 is equivalent to 0.15%.
- As of 25 June 2020 [23], the total number of coronavirus COVID19 cases in Victoria was 1,917 with an increase of 33 since the previous day's report.
   More than 716,000 tests were processed to date.
   33/20,000 is equivalent to 0.16%.
- As of 24 June 2020 [24], the total number of coronavirus COVID19 cases in Victoria was 1,884 with an increase of 20 since the previous day's report.
   More than 696,000 tests were processed to date.

More properly, we should compute the positive rate as the number of infected reported on a given day vs. the number of tests performed earlier that have been processed to produce these results. This information is missing. Usually, it takes 1 to 2 days to have a swap test result. The problem of false positive and false negative answers from the test is also worth mentioning. Additionally, mass testing has also offered the opportunity to get infected.

If we consider the number of tests performed the day before, or two days before, and the number of positive cases reported on a given day, the positive rates are about the same 0.3% experienced since the beginning of the outbreak in Victoria.

For example, correlating the number of positive cases of June 30, 2020, with the number of tests of June 28, 2020, the positive rate is 64/18,000 equivalent to 0.36%. Correlating the number of positive cases of June 29, 2020, with the number of tests of June 27, 2020, the positive rate is 71/22,000 equivalent to 0.32%.

These numbers should not be compared directly with those before the scandal that rocketed the Victorian government started. By focusing towards the most disadvantaged suburbs of Melbourne such as Broadmeadows, and organizing mass testing of the order of 20,000-22,000 per day in these areas, this will show a larger positive rate than conducting a much smaller number of tests of 4,000 -6,000 per day all over Melbourne without any mass congregation. Immediately before the scandal in the Victorian Government, the positive rates were about the same, despite the testing was less focused on the most disadvantaged suburbs of Melbourne, and citizens were not chased into their homes to conduct mass testing.

- As of 16 June 2020 [25], the total number of coronavirus COVID19 cases in Victoria was 1,741 with an increase of 9 since the previous day's report. More than 599,000 tests were processed to date. 9/5,000 is equivalent to 0.18%.
- As of 15 June 2020 [26], the total number of coronavirus COVID19 cases in Victoria was 1,732 with an increase of 12 since the previous day's report. More than 594,000 tests were processed to date. 12/4,000 is equivalent to 0.30%.
- As of 14 June 2020 [27], the total number of coronavirus COVID19 cases in Victoria was 1,720 with an increase of 9 since the previous day's report. More than 590,000 tests were processed to date. 9/8,000 is equivalent to 0.11%.
- As of 13 June 2020 [28], the total number of coronavirus COVID19 cases in Victoria was 1,711 with an increase of 8 since the previous day's report.
   More than 582,000 tests were processed to date.

There is therefore no significant difference in the positive rate, with the small changes explained by the changed rules of testing and the focus on the most disadvantaged areas of Melbourne.

As shown in Table 2, the positive rate in Victoria has been about 0.3% since the beginning of the outbreak, with oscillations during this period due to the variable selection of the sample population, the size of the sample population, and the socio-economical and cultural background of the sampled population.

None of these factors was considered.

An extraordinary "stay-at-home order" to last until July 29, 2020, was issued on June 30, 2020, for 10 postcodes, 36 suburbs of Melbourne [29].

The premier of Victoria declared on Tuesday, June 30, 2020, an even larger number of tests than those appearing on the dhhs.vic.gov.au web site, more than 93,000, conducted across Victoria since the Thursday before. Many of these tests were conducted knocking 37,000 doors in the targeted suburbs.

# The record of 108 new coronavirus infections of July 4, 2020, in Victoria, Australia

On July 4, 2020, it was reported that during the last 24 hours there have been all over Australia 113 new cases and 50,176 new tests, which is still a low rate of 0.23%. The 108 new cases of Victoria that made the headlines as a record-high number of cases were only the result of the number of daily tests further increased in Victoria from

about 20,000 to about 30,000, plus neglecting seven cases reclassified.

Despite the headlines of the mainstream media, and the perception from overseas of the severity of the Covid19 outbreak, the percentage of positive vs. tested in Australia is still in between the world smallest, Table 5.

Table 5 – Coronavirus tests by the state of Australia as per 4 July 2020. Image from [30]

Jurisdiction	Total tests conducted	Positive tests (%)
Australia	2,668,036	0.39
	32,016	0.31
	924,318	0.49
	14,523	0.25
	386,727	0.39
	160,000	0.39
	52,665	0.45
	906,574	0.39
WA	191,213	0.39

Same of June 27, 2020, the number of likely infected (the swap test has false positive and false negative) over the number of tested for Australia is 0.33%.

Regarding the tests conducted mostly in Victoria, the positive rate has not changed at all, only the number of tests has changed.

- As previously written, on June 30, 2020 [18], the total number of coronavirus COVID19 cases in Victoria increased by 64 to 2,159 with more than 17,000 more tests processed to date. 64/17,000 is equivalent to 0.38%.
- As of July 1, 2020 [31], the total number of coronavirus COVID19 cases in Victoria increased by 73 to 2,231.
   More than 830,000 tests have been processed to date. 73/21,000 is equivalent to 0.35%.
- As of July 2, 2020 [32], the total number of coronavirus COVID19 cases in Victoria increased by 72 to 2,303. More than 850,000 tests have been processed to date. 72/20,000 is equivalent to 0.36%.
- As of July 3, 2020 [33], the total number of coronavirus COVID19 cases in Victoria increased by 66 to 2,368. More than 880,000 tests have been processed to date. 66/30,000 is equivalent to 0.22%.
- As of July 4, 2020 [34], the total number of coronavirus COVID19 cases in Victoria increased by 101 to 2,469.
   More than 906,500 tests have been processed to date. 101/26,500 is equivalent to 0.38%.

The record 108 new cases are used by the mainstream media to support even harsher containment measures, with [35] and [36] just a few examples, are an artifact of the increased number of tests performed in the same most disadvantaged areas recently targeted.

The mainstream media [35], [36] was able to read the first, but not the second of the statements by dhhs.vic.gov.au of July 4, 2020, where is written: "The total number of coronavirus (COVID-19) cases in Victoria is 2469 with 108 new cases reported yesterday." But also "The overall total has increased by 101, with seven cases reclassified." Not only the mainstream media but also the Victorian Government were able once more to relate the number of positive cases to the number of tests performed.

The number of tests reported on July 3, is up 50% from the day before, from 20,000 to 30,000. Thus, the number of positive cases of July 4 should have been up to the same

50% more from the day before. From 66, it was expected 99. It was 101. The likely rate of 101/30,000 is about the same 0.34% that has been measured in Victoria for a long time.

The community intrusion with unsafe over-testing and over-control did not permit to immediately dramatically increase the percentage of the positive over the tested. There is no immediate change in this percentage despite the focus on the most disadvantaged sectors. However, the over-testing and over-control of large sectors of the population resulted in larger opportunities for community spreading of the virus. While somebody infected by Covid19 self-isolating at home is not a vehicle for spreading the virus, the same person forced out of the house to get tested in an unsafe, mass procedure becomes a spreader.

# Over-testing and over-controlling and increased infectivity rate as per July 25, 2020

In early June 2020, the number of Covid19 infected cases in Victoria was extremely low, despite reinfection from improper management of overseas returning travelers, plus the fact that Covid19 was still hiding in the community. Roughly, the number of positive tests over the number of tests performed in early June was 0.1%, i.e. 1 positive case of Covid19 infection over 1,000 people tested.

Then, on the 14<sup>th</sup> of June 2020, the government of Victoria, Australia got rocketed by a corruption scandal. Immediately, the number of tests performed per day was increased dramatically, with also an increasing focus on the most disadvantaged suburbs of Melbourne.

While the best epidemiological science suggests that anyone suspected of being infected should self-isolate at home, not only the government of Victoria requested people feeling unwell to travel to the hospital and get tested, with huge risks to spread the disease during travel, while waiting for the test in the hospital, during the test, and returning home.

The government of Victoria also organized the mass testing, that if unsafely conducted, may only produce more infection. The best epidemiological science does not suggest of having mass tested for the potentially infected people one after the other, waiting together, by direct contact with healthcare officials dressing inadequate protective gear. Mass testing was straightaway performed for all the occupants of public homes, forced inside their buildings for days. Similarly, tests were also performed moving door-to-door of homes in the most disadvantaged areas, without the necessary equipment to perform the test in full safety.

As shown in Fig.2.a, the number of tests increased from well below 5,000 a day in the first half of June to almost 20,000 a day in the second half of June. Then, it has further increased in July to about 30,000 a day.

As shown in Fig. 2.b and 2.c, the number of infected overtested was initially about the same, with minimal increments due to testing of more disadvantaged households, where the government of Victoria was aiming at finding higher percentages of Covid19 infection.

Then, with a lag of two weeks, the results of the infection spreading procedures started to manifest end of June, with the percentage of infected over-tested suddenly rising above 0.2%, and then continuing to grow up to the present values exceeding 1.5%, roughly 10 times what they were at the time the Covid19 scare campaign was orchestrated.

Phased with the discovery of more cases, then the government introduced more testing, then more restrictions.

From July 8, people living in the 5 million people metropolitan Melbourne and the Mitchell Shire, must stay at home and can only leave home for one of the four reasons – shopping for food and supplies, care and caregiving, exercise, and study and work, if they can't do it from home. This translated in roadblocks not only to exit, but also to entry Melbourne from supposed to be Covid19 free areas, requiring 4 hours to pass through, with unnecessary contacts between potentially infected people and police officers, and indirect contacts in between every driver in the queue. From July, 22 people living in metropolitan Melbourne and the Mitchell Shire must wear a mask when leaving home for one of the four reasons.

As per today (July 24, 2020) people having symptoms of coronavirus (COVID-19) are still requested by the government to get tested. Getting tested for coronavirus (COVID-19) is considered medical treatment and it is one of the four reasons people can leave home. Many exemptions apply. Law enforcement officials conduct a large number of checks. This unsafe practice is dramatically reducing basic freedom of many without providing any protection to the community in general, and the elderly in nurses homes in particular that start to be affected by an increasing number of fatalities.

As here shown, in the beginning, the percentage of positive over-tested was about constant, despite the number of tests was increased. The focus on the most disadvantaged suburbs of Melbourne was not a reason for a drastic increment of the infectivity rate.

Then, thanks to the wrong measures, that made possible the spreading of the virus from people being tested to other people being tested, as well as the general population and health workers, the infectivity rate started to climb.

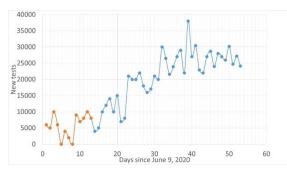
It has not been the infectivity rate to climb first, but the number of tests. This proves as the number of tests, due to the conditions in which they were performed, was the driving force for the outbreak to progress.

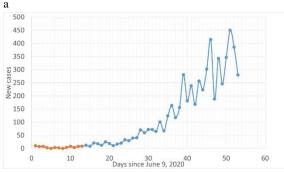
Additional to forcing potentially infected people to get in touch with other people to get them tested, rather than protect them and the community from the spreading of the virus, it must be noticed as the enforcement of the full lockdown by police is also a cause for spreading, as officials controlling documents of people one after the other can also be a vehicle of the virus spreading.

The correlation between the increased number of cases and the start of massive testing often forcing people to undertake tests, and the introduction of more restrictive measures also enforced without consideration of the opportunity of further transmission is the clear reason Victoria is now experiencing the most serious outbreak within Australia.

The problem is not the number of tests, it is the way they get done, without paying any attention to avoid the

spreading of the virus. Same of the police checks done to enforce rules not always reasonable. The numbers of infected healthcare workers and police officers are increasing the same as the general public. Unfortunately, also the number of fatalities in the nurses' homes that were supposed to be protected but are not, is increasing. The focus should be made on protecting the vulnerable, not over-testing, and over-limiting the movements of the healthy population. Those in between the healthy population that get infected, are very likely only asymptomatic or mild and must self-isolate themselves at home, not moving around to spread out the virus to satisfy brainless accountancy exercises.





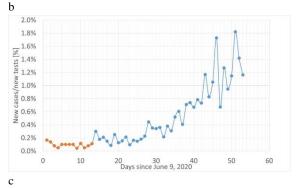


Fig. 2 – Number of tests performed, positive Covid19 cases, and the ratio of positive cases to tests performed in Victoria. Data from www.dhhs.vic.gov.au. Red is the situation before the Victorian government scandal. Blue is the situation since the day mass testing was started to deviate the public opinion from the problem. While the number of tests performed is not reported for June 6 and 7, the number reported for June 8 is likely wrong. Thus, the infectivity rate of these 3 days is taken as the average infectivity rate of June 5 to June 9.

### DISCUSSION

While the world is planning to reopen businesses, one of the states (Victoria) of one of the less affected countries of the world (Australia) decided to go back to a lockdown never enforced before, based on flawed epidemiologic science that does not consider the number of tests performed to obtain positive results, as well as does not account for the changes in the testing rules and the focus on specific sectors of the population.

To be noted, opposite to other states, such for example New South Wales, Victoria did not require a negative day 10 swap test as a condition to leave the designated quarantine facilities for returning overseas travelers. However, Victoria promoted home testing of citizens living in their predefined "hot spots" of Covid19 infection before testing the returning travelers. The practically compulsory day 10 swap test for returning overseas travelers has been established the same day all the international flights have been diverted to other states.

It is not this sort of mismanagement and misrepresentation of an outbreak that may permit us to understand the way out of the Covid19 pandemic. If the objective infectivity and lethality of Covid19 are dramatically reducing, why Victoria and Australia still enforce harsh containment measures after more than 4 months since the outbreak? Is mass vaccination for Covid19 what many countries are after as the only way to return to normality?

From the Orwellian dystopia experienced so far, apart from local issues in Victoria, it is not that difficult to forecast that Australia will be one of the first countries to enforce mass vaccination for Covid19, no matter which are the epidemiologic data of the pandemic at the time the vaccine will be available in the market.

The facts of Covid19 infection should be used to plan a return-to-near-normality the sooner the better. However, these arguments are not welcomed by those supporting mass vaccination as the solution to a problem pictured much worse than what it is.

There is objectively no need for a vaccine of questionable utility, safety, and efficacy, but there are many that may get advantages in terms of power and money from the opposite conclusion. Herd immunity through mass vaccination is not needed, and it is anyway unlikely to work. The time frame to properly develop a vaccine is long, and the result is uncertain. Past experiences for SARS and MERS, close relatives of Covid19, have been unsuccessful. Animals vaccinated using spike protein-based vaccines against SARS and MERS had worse outcomes when challenged with the viruses. The SARS outbreak ended before the vaccines were ready. After 5 years from the SARS outbreak, in 2008, efficacy and safety evaluation in humans were still to be started [37]. Veterinary vaccines against coronaviruses do not work very well. As optimistically reported in [38], vaccinated animals still display significant disease upon challenge. Similarly, the MERS coronavirus outbreak is ongoing since 2012. At the end of 2019, no vaccine (or specific treatment) for MERS is currently available, [39]. Covid19 vaccines are not expected to work very well, and they are not expected to be safe either. Express coronavirus vaccines are unnecessary or even dangerous [40]. The immune system of high-risk groups no longer reacts adequately to the vaccine. Thus, the vulnerable benefits the least from vaccination.

The vaccine against the swine flu of 2009, led to sometimes severe neurological damage [41],[42]. In the testing of new coronavirus vaccines, serious complications, and failures [43],[44] have already occurred. The global vaccine program (and digital ID) being promoted for Covid19 is thus difficult to be implemented with success and acceptable risk. Regarding the use of unproven vaccines in Africa, it must be recalled the recent experience of the Diphtheria-Tetanus-Pertussis (DTP) vaccine in Africa [45]. Before the campaign, nobody performed the randomized, doubleblind placebo-controlled studies necessary to ascertain if the DTP vaccine yields benefits. Among 3-5-month-old children, having received DTP (± OPV, Oral Polio Vaccine) was associated with a mortality hazard ratio (HR) of 5 compared with not-yet-DTP-vaccinated children. Differences in background factors did not explain the effect. The negative effect was particularly strong for children who had received DTP-only and no OPV (HR = 10). All-cause infant mortality after 3 months of age increased after the introduction of these vaccines (HR = 2.12) [45].

Similar issues have been experienced also in Europe, for example with the HPV vaccine [46],[47],[48],[49],[50]. Safety is a major issue in many vaccines [46]. Majority of vaccines that were designed to prevent diseases caused more death and diseases than public exposures to infective agents [47],[48] questions the efficacy of the HPV vaccine. the trials themselves generated significant uncertainties undermining claims of efficacy. It is still uncertain whether human papillomavirus (HPV) vaccination prevents cervical cancer as trials were not designed to detect this outcome, which takes decades to develop. The trials used to test the vaccine may have overestimated the efficacy of the vaccine. [49] reviewed HPV vaccine pre- and postlicensure trials to assess the evidence of their effectiveness and safety. HPV vaccine clinical trial design, and data interpretation of both efficacy and safety outcomes, were largely inadequate. selective reporting of results from clinical trials. significant misinterpretation of available data. [50] reports of serious adverse events after HPV vaccination: a critical review of randomized and postmarketing case series.

There is no need for a Covid19 vaccine, that may only deliver more damage than benefit, same as the indiscriminate restrictions to societal function imposed for no medical reason. Covid19 is not a health emergency, it is a political and economic emergency.

The World Health Organization and the GAVI Vaccine Alliance have the same top contributor, the Bill and Melinda Gates Foundation [51],[52]. The direct and indirect (through GAVI) contribution to the WHO is the world's largest, well above the US or the UK<sup>[51]</sup>. The contribution to GAVI has been USD 4.1 billion total to-date, 1.6 billion for the latest period 2016-2020 [52]. GAVI and Microsoft are in between the major partner of the ID2020 digital ID alliance [53]. The director-general of the World Health Organization was formerly a GAVI board member [54]. This is an indication of an unacceptable conflict of interest, that may promote a solution welcomed by a few individuals and corporations to apply to everybody.

Finally, it must be noticed that there are no reliable tests for the novel coronavirus Covid19 virus, and the PCR test is everything except than the "gold standard" in testing for Covid19, as it does not make any difference in between new and old coronaviruses, and does not provide any indication of the severity of the infection. The PCR test is a sample of cells that amplifies any DNA to look for "viral sequences". Taking a very tiny amount of DNA and growing exponentially until the analysis is possible suffers from contaminations in the sample that are also amplified. Additionally, looking for partial viral sequences, not whole genomes, identification of a single pathogen is troublesome. Thus, this test may only tell if the viral sequence is related to the huge family of coronaviruses. The other major issue of the PCR is that this test does not give any indication of the viral load. The viral load is the most relevant aspect, as having only a few viruses, usually will not cause illness, or make spreading likely. Opposite, having many viruses, may sicken dramatically, and increase the risk of spreading exponentially. Coronaviruses are incredibly common and there are coronaviruses of many different strains.

#### **CONCLUSIONS**

No country knows the total number of Covid19 infection. We only know the infection status of those who have been tested. The counts of confirmed cases depend on how much a country tests. Without testing, there is no infection. The recent "hot spots" of Covid19 infection in Melbourne, Victoria, Australia were not an indication of more infectivity of Covid19, only an artifact of the largest number of tests performed, and the change of rules for the testing also focusing on the more disadvantaged suburbs of Melbourne.

It is important not to over-test and over-control, but to adopt measures that reduce rather than increase the risk of spreading. Unsafe over-testing and over-controlling is the reason why Victoria has moved from percentages of infected over those tested of 0.1-0.2% to values approaching 2%. The curve of the infected over the tested, the only indication significant for an epidemiologist, is trailing the novel measures introduced by the Victoria governments by almost 14 days, as a clear indication these measures are responsible for the growing percentages of infected.

Corruption is the open secret of global health. While there may certainly be somebody interested in shifting the focus from one issue to another, or enforce mass vaccination for Covid19, this should not happen. Epidemiological science should be based on the scientific method. Due to the overall low lethality and the already declining spread, a Covid19 vaccine does not seem needed, as the cons largely exceed the pros. While mainstream media and some interested parties are overrating the present status of the Covid19 outbreak, it should be clear as the health and well-being of people, political goals, and large corporate profits have nothing in common.

### **COMPETING INTERESTS**

The author received no funding and has no conflict of interest to declare.

#### REFERENCES

- [1] Swiss Policy Research. Facts about Covid-19. <a href="https://swiss-doctor-on-covid-19/#latest">swiss-doctor-on-covid-19/#latest</a>, accessed June 28, 2020.
- [2] Ferguson N, Laydon D, Nedjati Gilani G, Imai N, Ainslie K, Baguelin M, Bhatia S, Boonyasiri A, Cucunuba Perez ZU, Cuomo-Dannenburg G, Dighe A. Report 9: Impact of nonpharmaceutical interventions (NPIs) to reduce COVID19 mortality and healthcare demand. Preprint at Spiral. doi.org/10.25561/77482.
- [3] Boretti A. After Less Than 2 Months, the Simulations That Drove the World to Strict Lockdown Appear to be Wrong, the Same of the Policies They Generated. Health Services Research and Managerial Epidemiology. 2020 Jun 16; 7:2333392820932324. DOI: 10.1177/2333392820932324
- [4] Bendavid E, Mulaney B, Sood N, Shah S, Ling E, Bromley-Dulfano R, Lai C, Weissberg Z, Saavedra R, Tedrow J, Tversky D. COVID-19 Antibody Seroprevalence in Santa Clara County, California. MedRxiv. 2020 Jan 1.. Preprint at Medrxiv. doi.org/10.1101/2020.04.14.20062463
- [5] The Centre for Evidence-Based Medicine. Global Covid-19 Case Fatality Rates. www.cebm.net/covid-19/global-covid-19case-fatality-rates/, accessed June 28, 2020.
- [6] L'epidemiologia per la sanità pubblica, Istituto Superiore di Sanità. Caratteristiche dei pazienti deceduti positivi all'infezione da SARS-CoV-2 in Italia. www.epicentro.iss.it/coronavirus/sars-cov-2-decessi-italia, accessed June 28, 2020.
- [7] Simkins J D. French carrier surpasses Theodore Roosevelt with over 1,000 confirmed cases of COVID-19. www.navytimes.com/news/your-navy/2020/04/20/frenchcarrier-surpasses-theodore-roosevelt-with-over-1000confirmed-cases-of-covid-19/, accessed June 28, 2020.
- [8] Boretti A. Analysis of the Charles De Gaulle Aircraft Carrier Covid19 Epidemic: Infectivity and Fatality in the Young, Healthy, Active Population: Lesson from the Charles de Gaulle Aircraft Carrier Covid19 Experience, Integrative Journal of Medical Sciences, June 14, 2020. doi.org/10.15342/ijms.7.174
- [9] Boretti A. Sustainable post Covid19 lockdown strategy through evidence-based policy: Analysis of Covid19 fatalities across Europe, Integrative Journal of Medical Sciences, June 14, 2020. doi.org/10.15342/ijms.7.172
- [10] Boretti A. Some doubt the Covid19 containment measures on the generally healthy population made any difference for Italy: Covid19 fatalities much larger in Europe, United States and Canada than elsewhere, Integrative Journal of Medical Sciences. Published June 21, 2020. mbmj.org/index.php/ijms/article/view/179
- [11] health.gov.au. Coronavirus (COVID-19) current situation and case numbers. <a href="https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/coronavirus-covid-19-current-situation-and-case-numbers">www.health.gov.au/news/health-alerts/novel-coronavirus-covid-19-current-situation-and-case-numbers</a>, visited June 28, 2020.
- [12] Ourworldindata. Coronavirus (COVID-19) Testing ourworldindata.org/coronavirus-testing, visited June 28, 2020.
- [13] Victoria Kelly-Clark V. Victorian Government Rocked by Allegations of Corruption and Branch Stacking. www.theepochtimes.com/victorian-government-rocked-byallegations-of-corruption-and-branch-stacking 3388487.html, visited June 28, 2020.
- [14] Nick McKenzie N, Ilanbey S, Tozer J. 'F\*\*k the premier': Labor's secret tapes reveal industrial scale stackathon. www.theage.com.au/national/victoria/f-k-the-premier-labor-ssecret-tapes-reveal-industrial-scale-stackathon-20200614p552g2.html, visited June 28, 2020.
- [15] Zagon C. Minister Adem Somyurek quits Victorian Labor Party after being sacked from cabinet . www.9news.com.au/national/victorian-labor-mp-accused-ofbranch-stacking/2ab85f4f-ab99-4496-86be-dba5ac63622c, visited June 28, 2020.
- [16] Willingham R, Dunstan J. Adem Somyurek quits Victorian Labor Party after 60 Minutes airs allegations of branch stacking, offensive language. <u>www.abc.net.au/news/2020-06-15/victorian-labor-minister-adem-somyurek-sacked/12354870</u>, visited June 28, 2020.

- [17] Gomes L H. Adem Somyurek sacked as Victorian Labor minister after explosive allegations of branch stacking . www.theguardian.com/australia-news/2020/jun/15/ademsomyurek-quits-as-victorian-labor-minister-after-explosiveallegations-of-branch-stacking, visited June 28, 2020.
- [18] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 30 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-30-june-2020, visited June 30, 2020.
- [19] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 29 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-29-iune-2020. visited June 30, 2020.
- [20] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 28 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-28-june-2020, visited June 28, 2020.
- [21] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 27 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-27-june-2020, visited June 28, 2020.
- [22] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 26 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-26-june-2020, visited June 28, 2020.
- [23] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 25 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-25-june-2020, visited June 28, 2020.
- [24] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 24 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-24-june-2020, visited June 28, 2020.
- [25] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 16 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-16-june-2020, visited June 28, 2020.
- [26] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 15 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-15-june-2020, visited June 28, 2020.
- [27] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 14 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-14-june-2020, visited June 28, 2020.
- [28] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 13 June 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-13-june-2020, visited June 28, 2020.
- [29] Zagon, C., Coronavirus: Victoria to lockdown COVID-19
  hotspots amid state's outbreak spike.
  www.9news.com.au/national/coronavirus-victoria-outbreaklockdowns-update-hotspots-border-daniel-andrews-covid-19address-health-politics-news/5bcfa74b-6f06-40d4-9b91c488535d82d7, visited June 30, 2020.
- [30] health.gov.au. Coronavirus (COVID-19) current situation and case numbers. <a href="https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/coronavirus-covid-19-current-situation-and-case-numbers">www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/coronavirus-covid-19-current-situation-and-case-numbers</a>, visited July 4, 2020.
- [31]dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 1 July 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-1-july-2020, visited July 4, 2020.
- [32] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 2 July 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-2july-2020, visited July 4, 2020.
- [33] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 3 July 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-03july-2020, visited July 4, 2020.
- [34] dhhs.vic.gov.au. Coronavirus (COVID-19) daily update. 4 July 2020. www.dhhs.vic.gov.au/coronavirus-update-victoria-4july-2020, visited July 4, 2020.
- [35] ABC, Victoria records 108 new coronavirus infections, locks down suburbs and public housing. <a href="https://www.abc.net.au/news/2020-07-04/coronavirus-numbers-victoria-rise-again-lockdown-suburbs/12422456">www.abc.net.au/news/2020-07-04/coronavirus-numbers-victoria-rise-again-lockdown-suburbs/12422456</a>, visited Juley 4, 2020.
- [36] The Age, More suburbs in lockdown as Victoria records 108 new coronavirus cases. www.theage.com.au/national/victoria/more-suburbs-in-lockdown-as-victoria-records-108-new-coronavirus-cases-20200704-p558zp.html, visited Juley 4, 2020.
- [37] Enjuanes L, DeDiego ML, Álvarez E, Deming D, Sheahan T, Baric R. Vaccines to prevent severe acute respiratory syndrome

- coronavirus-induced disease. Virus research. 2008 Apr 1;133(1):45-62.
- [38] Roper RL, Rehm KE. SARS vaccines: where are we?. Expert review of vaccines. 2009 Jul 1;8(7):887-98.
- [39] who.int. Middle East respiratory syndrome coronavirus (MERS-CoV). <a href="https://www.who.int/news-room/q-a-detail/middle-east-respiratory-syndrome-coronavirus-(mers-cov">www.who.int/news-room/q-a-detail/middle-east-respiratory-syndrome-coronavirus-(mers-cov)</a>, accessed June 28, 2020.
- [40] Jiang S. Don't rush to deploy COVID-19 vaccines and drugs without sufficient safety guarantees. www.nature.com/articles/d41586-020-00751-9, accessed June 28, 2020.
- [41] Porter T. Brain-Damaged UK Victims of Swine Flu Vaccine to Get £60 Million Compensation. <a href="www.ibtimes.co.uk/brain-damaged-uk-victims-swine-flu-vaccine-get-60-million-compensation-1438572">www.ibtimes.co.uk/brain-damaged-uk-victims-swine-flu-vaccine-get-60-million-compensation-1438572</a>, accessed June 28, 2020.
- [42] Haseltine W A. Did The Oxford Covid Vaccine Work In Monkeys? Not Really. www.forbes.com/sites/williamhaseltine/2020/05/16/did-the-oxford-covid-vaccine-work-in-monkeys-not-really/#2b2bd0163c71, accessed June 28, 2020.
- [43] Mullard, A., 2020. COVID-19 vaccine development pipeline gears up. The Lancet, 395(10239), pp.1751-1752.
- [44] Kennedy R F Jr.childrenshealthdefense.org/news/vaccine-trialcatastrophe-moderna-vaccine-has-20-serious-injury-rate-inhigh-dose-group/, accessed June 28, 2020.
- [45] Mogensen SW, Andersen A, Rodrigues A, Benn CS, Aaby P. The introduction of diphtheria-tetanus-pertussis and oral polio vaccine among young infants in an urban African community: a natural experiment. EBioMedicine. 2017 Mar 1;17:192-8.

- [46] Walia A. Another Renowned Scientist Questions The Safety of HPV Vaccines. <a href="www.collective-evolution.com/2020/06/13/another-renowned-scientist-questions-the-safety-of-the-hpv-vaccine/">www.collective-evolution.com/2020/06/13/another-renowned-scientist-questions-the-safety-of-the-hpv-vaccine/</a>, accessed June 28, 2020
- [47] Khatami M. Safety concerns and hidden agenda behind HPV vaccines: another generation of drug-dependent society?. Clinical and translational medicine. 2016 Dec;5(1):1-7..
- [48] Rees CP, Brhlikova P, Pollock AM. Will HPV vaccination prevent cervical cancer?. Journal of the Royal Society of Medicine. 2020 Feb;113(2):64-78.
- [49] Dilley S, Miller KM, Huh WK. Human papillomavirus vaccination: Ongoing challenges and future directions. Gynecologic Oncology. 2020 Feb 1;156(2):498-502.
- [50] Martínez-Lavín M, Amezcua-Guerra L. Serious adverse events after HPV vaccination: a critical review of randomized trials and post-marketing case series. Clinical rheumatology. 2017 Oct 1;36(10):2169-78.
- [51] who.int. Voluntary contributions by fund and by contributor, 2018. <a href="www.who.int/about/finances-accountability/reports/A72\_INF5-en.pdf?ua=1">www.who.int/about/finances-accountability/reports/A72\_INF5-en.pdf?ua=1</a>, visited June 28, 2020
- [52] GAVI.org. Funding: The Bill & Melinda Gates Foundation. www.gavi.org/investing-gavi/funding/donor-profiles/bill-melinda-gates-foundation, visited June 28, 2020.
- [53] ID2020. Partners. id2020.org/alliance, visited June 28, 2020.
- [54] GAVI.org. Gavi welcomes election of new WHO Chief. www.gavi.org/gavi-welcomes-election-of-new-who-chief, visited June 28, 2020.