

Covid19 Silver Bullets

© by Rob Grosche (rob@i-optic.com)

Vaccine1 Vaccine2 Vaccine3 bla bla bla.... unless there is a fortune to be made, selling vaccines, research, opinions, politics, equipment, PPE's and useless tracing Apps, the Gates Foundation, Oxford University and WHO aside, there is no interest shown in what already works to end a pandemic quickly today.

Greed, professional jealousies and shutting down internet debates and the publication of innovations, all contribute to looking for a silver vaccine bullet which will be built in haste and probably regretted at leisure because safeguards are fast tracked and safety protocols ignored for political gain, profit motivated subterfuges and expediency reasons.

Politics and war capabilities also play a part. Whoever wins the vaccine race will dominate large new territories on the world map. Russia has already forced a weak nation to capitulate. China and Israel are already bristling with aggression and the USA is losing traction under Trump and that is just the beginning of this brave new covid19 world.

Even if two or three of billions of vaccine doses are made by the end of 2021 the poor of the world will continue to die and the rich will prosper even with whatever unknown side effects come from using these hastily developed, hard to distribute unstable vaccines. Oxford universities efforts are here a stand-out stable low cost solution. Showing how a few days can change fortunes and opinions which are as unstable as the early vaccine successes already announced.

But, for a moment lets put aside the politics and greed driven solutions which I like to call the silver vaccine bullets because, just as the name silver implies, it is for the rich, the powerful and the manipulators alone. While the poor slip back into destitute. Destroying decades of progress made on the anti poverty and disease eradication front.

Then there is the current, instant need for a silver bullet. In the USA alone one to two thousands die every day. 80,000 are in hospital, 200,000 new cases every day and 260,000 have died. That equates to almost one 9/11's every other day.

So while we all wish for a silver bullet, as this article is written, there are increasingly hopeful developments to save the rich and powerful, eventually at some point in the future.

Be sure that you as an individual will have to beg to get your share of these vaccine silver bullets. Because you are just one of many consumers of vaccine technologies and are totally under the spell of the powers which control the vaccine supply and shortages. Be ready to be hopeful, manipulated and humbled by what comes our way in 2021.

This position now begs the question if there are other ways to assist end this pandemic quicker.

Australia and New Zealand have already achieved the eradication of covid19 but have done so at a huge financial/economic cost and by putting its entire population into mentally depressing lock-down quarantine. Reinfections occur, but are usually introduced by foreign new arrivals.

Most visitors from questionable infection status destinations are now having to quarantine for 15 days before being allowed entry.

In their favour is the fact that they are islands and an island continent with often huge, scarcely populated territories.

Any way you want to spin this eradication success. It comes down to effective quarantine methodologies and possessing the wealth to hold-out in economically damaging lock-downs, until the virus has died out in the population.

Visits are now permitted between bubbles of infection free territories.

It is indisputable, that their quarantining, isolating and lock-down strategies have worked! Period.

The success of the Australian/New Zealand quarantine model is the forgotten silver bullet. But, however effective, it is still only a silver bullet for the rich.

To explain this, one only has to look at the daily grind experienced by a day labourer. They can not afford not to work, because the alternative is starvation and death. It is as stark as that. So what works in wealthy countries can not work for the worlds poor.

However, it is interesting to study why Australian and New Zealand were able to 'flatten the curve' leading to eradication, when other wealthy nations with similar covid19 infection rates suffered and are now again suffering second and third waves of the pandemic.

Let me begin by stating that by ending the pandemic, I mean eradication and by quickly I mean withing 29 days of the last known transmission of the last known infection to the last victim of covid19.

Only 30 days? how is this possible?

Surely this must be a mistake or ignorant hubris at play?

Let me begin by explaining the infection cycle. By infection I am just referring to the period [below in Grey and Red].

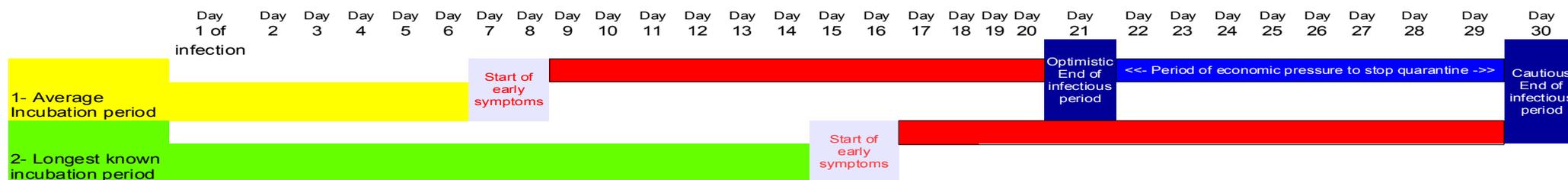
It is irrelevant if a person is infected. What is relevant is whether the infected person is infectious. ie. Able to infect other, which then turns into a messy infection hot-spot out break.

Its really simple infection arithmetic:-

Say you are infected on day 1 [Yellow and Green].

Early covid19 symptoms usually show after 7 days [Yellow-Grey].

Severe symptoms start usually after 10 days. The catch is that some people have a much longer covid19 symptom gestation period, that can be as long as 14 days [Green-Grey] This then means that there is a conflict between [Blue] opening the economy early after 21 days and being optimistic and opening the economy after 30 days, being cautious.



What other points are vital to eradicate covid19, if we choose to use old fashion quarantining?

There are three cornerstones to eradication.

1- Reduce contact between people to stop the infection:-

This means lock-downs. By lock-down I mean that individuals must stay at home. So that their opportunity to spread the infection is taken away from them. No social or business contact between people etc...

So, unless you lock down an entire city or region for 30days, covid19 elimination is nearly impossible.

I have already discussed why this is not possible in poor countries and comes at a huge cost to rich countries.

2- Vigilance:-

Being able to detect and outbreak early is vital to the covid19 eradication process.

But how can you monitor huge population for early covid19 symptoms [Grey and Red above] ?

3- Early detection and isolation of infectious individuals and their contacts during their infectious period:-

Again, using current technologies, infectious people – moving throughout the population are possible infectious for up to 14 days. This means that out quarantine measures will always be 14 days behind the point of infection.

In conclusion:- Given the difficulties listed above, only a total lock-down for 30 days is the only way to end the covid19 pandemic!

For rich countries it's the financial ruin which makes them use unsafe 'optimistic' early reopening methods, causing reinfections and deaths in order to avoid economic collapse.

Whereas poor countries will always have covid19 because they can simply not starve their population to death and therefore they have to allow some freedom of movement as well as the poor must ignore the lock downs if they want to stay alive and eat.

But is there are alternative way to stay vigilant, reduce person to person contact and detect outbreaks at a very early [Grey and Red] stage.

It is summarised in a technology I developed, named EPIDEM. EPIDEM is an APP, as well as a raft of professional backend- covid19 eradication tracker and health-workers tools, which together hold the promise of covid19 eradication.

EPIDEM used the lessons learned from the pandemic as well as from historically functioning quarantining methods. Further it is based on established epidemiological knowledge to improve outbreak vigilance.

So how can my EPIDEM technology be compared or even be considered to be a silver bullet?

I firmly believe in base-line principles which are irrefutable and peer reviewed as well as the WHO and the Australian covid19 eradication teams briefings and published insights.

There is a lot of noise out there about covid19 and the above sources are the pinnacle of what we know about this epidemic. We might argue about minor points, but enlarge, these sources have proven to be reliable, reasonably accurate and have proven the benefits of their advise in the field.

This know-how is at the heart of EPIDEM's epidemiological AI engine.

The EPIDEM epidemiological AI engine can collect daily the changes in the health status of either 'bubbles of linked people' or of 'entire city or country populations'.

The AI engine then grades and weights the evidence and issues a health status passport. This passport is based on the traffic light system. Dark Green for low infection risk.

Yellow/Green with a blue centre, showing the earliest trigger signs for an infection.

Amber for [Grey-Red] for nearing the 10 days from the point of infection and Red for showing fully developed infection symptoms.



Professional trackers, such as this covid19 Filipino team can now watch the development of outbreaks into raging hotspots live.

They can take corrective measures to limit the spread of covid19 outbreak quickly and effectively. Without the usual delay of around 10 to 14 days. Individual cases can be identified and they and their immediate contacts be isolated from the healthy [green] population.

However even the best covid19 tracker team can only see and deal with a small percentage of the population.

This is why EPIDEM uses crowd outbreak surveillance technology. Instead of hundreds of trackers looking for early signs of infections, EPIDEM users can watch over their friends and contacts themselves. This means that rather than a few thousand trackers eyeing the maps for outbreaks, there can be potentially millions of people watching over their friends and families.

Studies have shown, that the usual reluctance and privacy concerns vanish, once the APP users realise that they have an added layer of protection and are actively fighting to halt the spread of covid19.

The amazing thing about EPIDEM is its ability to form bubbles of linked people who all watch each other for early signs of infection outbreaks. This is no different to telling your mother or friend to get tested or to get into isolation because you discern early infection symptoms. We all care for our family and friends and EPIDEM just widens our concerns to acquaintances from work or school, or contacts we have had with our doctors and green grocers etc...

The more people use EPIDEM then more successful it can be. But what about those who refuse to use EPIDEM?

EPIDEM issues every user with three vital tools to protect themselves:-

1- Each user gets health advise based on the answers they gave to the epidemiological AI engine. This answer generated an infection risk passport.



If friends in your linked infection-free bubble stop using EPIDEM, they are put on a shame list- so that you can stop having contact with them, because they may be infectious.

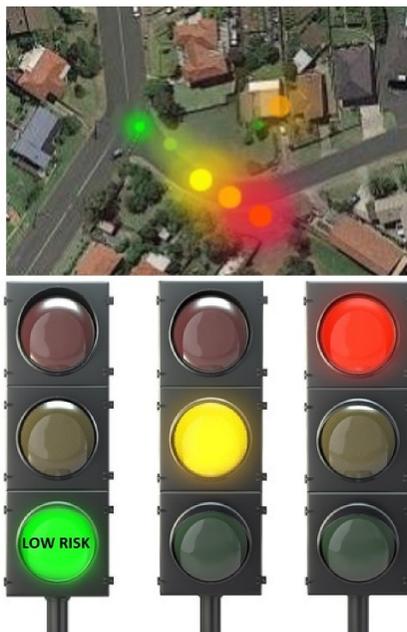
This applies social pressure to make them use EPIDEM for the sake of everyone in your infection free bubble. Your greengrocer might want to see your EPIDEM passport before you are allowed into his shop. Etc...

EPIDEM effectively stops people who carelessly play with your life, by wanting to make contact with you.

If you make a new contact who starts to use EPIDEM, you can consider them as a safe contact after 10 to 14 days.

Nay sayers might point out that it is not ethical to lock people out of your bubble of infection free friends and family. To which I answer with a return question. “Is it ethical to run a red light and kill people ? “.

2-EPIDEM has a surveillance map where all your contacts are linked. Every person in the link shows their daily health traffic light from green to red. This empowers every EPIDEM user to lower their risk of becoming infected.



3- EPIDEM has an infection location avoidance map which shows which ie. Towns have hot-spot outbreaks and which are relatively low risk to visit.

EFFICACY?

Naysayer will be quick to point out that the uptake of covid19 apps has been dismal. This is due in part to the fact that many of those early simple tracing apps did not work. In Australia, they identified less than 10 infected people. Which is dismal and their poor reputation is deserved.



I should point out that EPIDEM and 'EPIDEM Mobile Quarantine' has no connection or resemblance to early tracing apps. We can do some kind of tracing, using Big Date ie. Using data from Telcos to trace people who frequented an infected location, but this is a professional back-end tool and not connected to the EPIDEM APP.

So how can EPIDM work if only a small number of people are using it at the beginning?

Answer:- EPIDEM users form a chain of infection-free people into a bubble like mobile quarantine system.

Everyone outside this bubble is considered an unacceptably high infection risk and is banned from making contact with anyone in the bubble, until they have used EPIDEM for 14 days, after which time they are considered a safe contact and a valuable member of the infection free bubble.

The effect of this is that responsible, EPIDEM using groups or population will stabilise and self monitor for infection outbreaks. This will slow the spread of covid19 and free-up valuable epidemic fighting resources.

In time, as more and more infection-free bubbles join to form larger, infection free populations, entire towns and districts can stay infection free and move towards the goal of covid19 eradication.

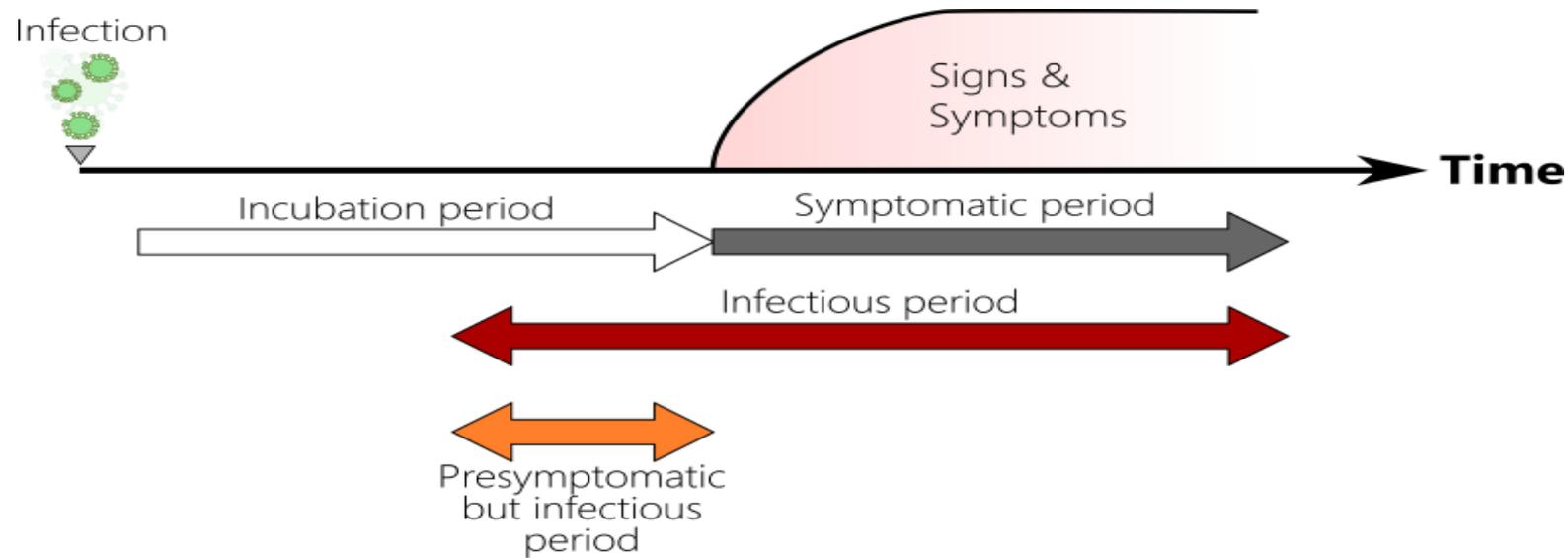
In summary, I am delighted to see a safe vaccine silver bullet become available. The sooner the better, but also consider that EPIDEM can halt the spread of covid19 and reopen your economy more safely right now in only 30 days. This is a long time before any vaccine will become available.

Refs:

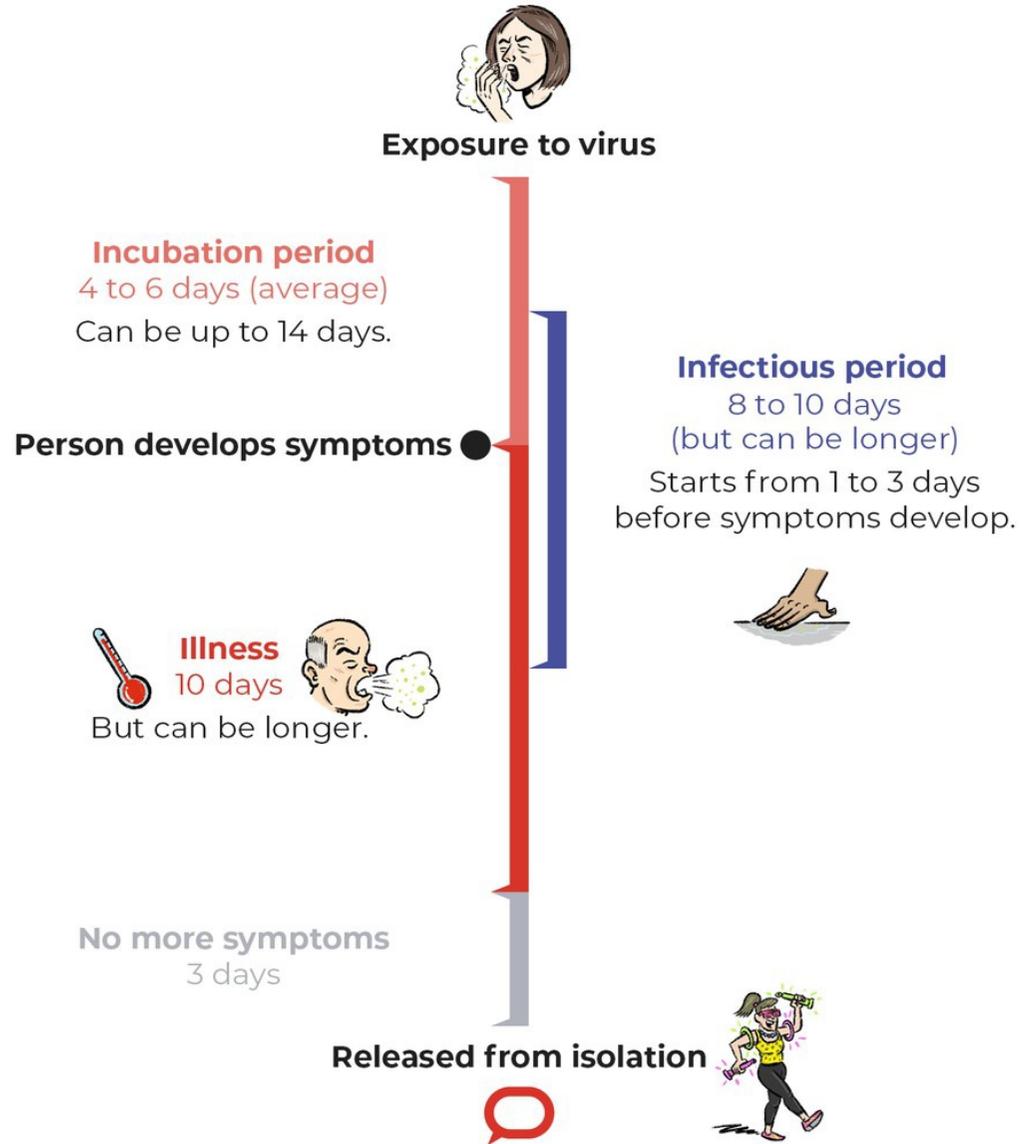
Harvard.edu **How long after I start to feel better will be it be safe for me to go back out in public again?**

The most recent CDC guidance states that someone who has had COVID-19 can discontinue isolation once they have met the following criteria:

1. It has been more than 10 days since your symptoms began.
2. You have been fever-free for more than 24 hours without the use of fever-reducing medications.
3. Other symptoms have improved.



Coronavirus progression in majority of cases



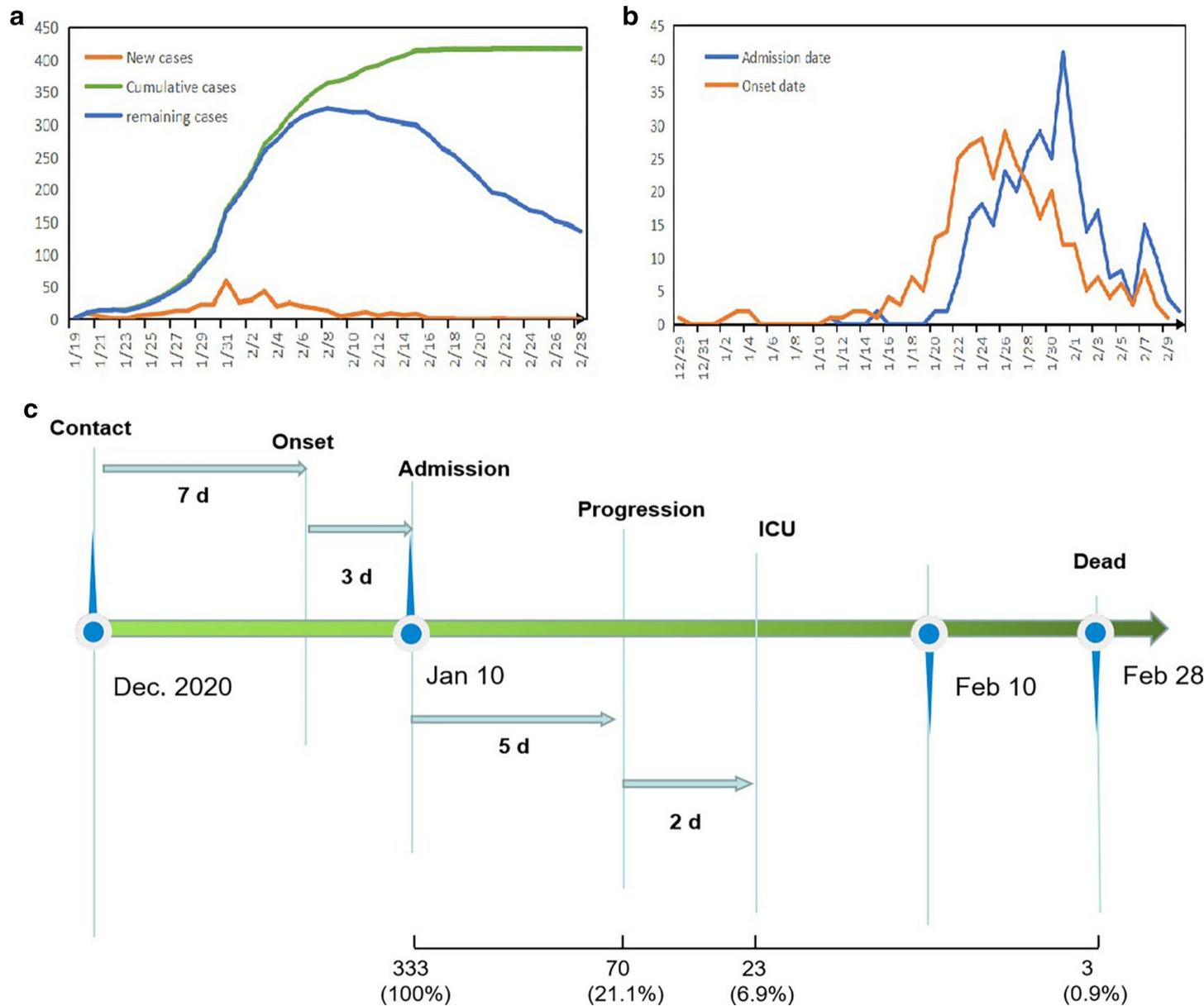
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Common
questionWho.int

How long do COVID-19 patients need to be isolated for?

It is important to note that the clinical criteria require that patients' symptoms have been resolved for at least three days before release from isolation, with a minimum time in isolation of 13 days since symptom onset.Jun 17, 2020

[Criteria for releasing COVID-19 patients from isolation](#)



epidemic trend and timeline in a COVID-19-designated hospital. **a** The outbreak of COVID-19 in Shenzhen according to official data from Jan. 10 to Feb. 28. **b** The admission date and onset date in the designated hospital. **c** The timeline of COVID-19 cases in the first month of admission

Ref: <https://translational-medicine.biomedcentral.com/articles/10.1186/s12967-020-02423-8>