

Vaccine passports – a way forward to reopening?

The coronavirus pandemic is the largest global health crisis in modern times. In addition, the measures implemented to prevent the virus from spreading have created an economic crisis on a par with the Great Depression, and resulted in the biggest restrictions on personal freedom of movement since the Second World War.

The vaccination programme is now finally under way, but it will take time to achieve herd immunity. In the meantime, many people hope that a vaccine certificate, known as a vaccine passport, could reduce the need for testing, quarantine and the closure of society.

[The COVID-19 vaccines](#) are highly effective in preventing the disease. Initial results [indicate](#) that they also prevent transmitting the infection, but more data will be needed to be certain of the actual effect. The World Health Organization (WHO) is therefore currently [not recommending](#) the use of vaccine passports as a substitute for other infection control measures.

Digital vaccine certificates

Vaccine certificates are not a new phenomenon. Since the 1950s, the yellow vaccine cards issued by the WHO have been used for travel to countries that require vaccination against diseases such as yellow fever and polio. In Norway, anyone can print out a vaccine card from the [Helsenorge.no](https://helsenorge.no) public health services portal.

The challenges associated with paper documents are that they are cumbersome to keep up to date, and that they have weak security mechanisms. The existence of [false](#) coronavirus tests upon entry to Norway illustrates the problem.

These problems can be overcome by making vaccine certificates digital. In Norway, all the prerequisites for doing this are already in place: Widespread use of

DIGITAL VACCINE PASSPORTS

- » show the current vaccination status on the holder's mobile phone.
- » would replace testing and quarantine at borders.
- » could also be used to reopen cultural centres and businesses across Norway.
- » widespread use could result in loss of community spirit and lead to an increase in surveillance.

smartphones, and an electronic vaccine registry ([SYSVAK](#)) which is continually updated.

Digital vaccine passports could obtain the current vaccine status of the holder from SYSVAK. The status could be displayed in the form of a [QR code](#) and linked to the holder's identity via, for example, facial recognition or an ordinary passport or ID card.

The health authorities are [currently looking into](#) what a Norwegian solution might look like. Other countries, including [Denmark](#) and [Sweden](#), have already launched plans for their own vaccine passports. The [WHO](#) is working on an international standard for the passports, and various technical solutions are currently being tested ([CommonPass](#), [IATA Travel Pass](#)).

Where can the passports be used?

When crossing international borders

An internationally accepted vaccine passport could reduce the need for quarantine and travel restrictions. Tourism, [air traffic](#) and commuting between countries for work purposes could therefore resume. The EU is [discussing](#) a joint vaccine passport for travel between EU Member States, after Greece, Spain and other countries [advocated](#) the idea.

Domestic working life, trade and industry

Services, trade, entertainment and other economic activity where physical contact is unavoidable could resume without risk of infection. Israel is launching a “[green passport](#)” with six months’ validity for those who are vaccinated, and within 72 hours of a negative coronavirus test. It could be a requirement at major events or for entry to museums, cafés and shopping centres. It should not be stipulated as a requirement in order to go to work or school or travel on public transport.

Health, care and welfare

A vaccine passport could help keep as many services as possible open without risk of infection. It could be a requirement for staff who work with vulnerable patient groups, for visits to nursing homes and other institutions, or for access to wellbeing services such as gyms and swimming pools.

Fair — for whom?

Greater freedom and improved welfare

Vaccine passports could both increase the individual’s freedom of movement, and save the economy and jobs.

Inequality

Vaccine passports would discriminate against those who have not had access to the vaccine, or who cannot be vaccinated for health reasons, such as pregnancy or an [allergic reaction](#).

As long as vaccines are in short supply, the passports could increase the level of conflict regarding the prioritisation of vaccines. Pressure on the country’s own authorities to secure vaccines for its inhabitants could also make international [vaccine solidarity](#) more difficult.

Incentives

A vaccine passport would provide an incentive to be vaccinated, provided that the vaccine is actually available. On the other hand, inequality could have a

demotivating effect. For example, young people, who are last in the vaccine queue, would see pensioners being allowed to go on holiday or to a concert, while they were forced to stay at home.

A reduced sense of community spirit could lead to those who have not been vaccinated being less inclined to follow infection control advice.

Privacy considerations

Vaccine data, like other health data, constitutes sensitive personal data. Compared with infection tracking, it would still be easier to protect privacy with regard to vaccine passports. The only information that is relevant in this context is whether a person has been vaccinated against COVID-19 and, if so, when.

Vaccine passports must be very secure. For example, [IBM](#) will use blockchain to ensure that the holder’s vaccination status cannot be manipulated, and store the status in encrypted form on the person’s mobile phone to prevent unauthorised access to their data.

Voluntary consent

As long as vaccination is voluntary, the vaccine passport should also remain voluntary. The more drawbacks associated with saying no, the lower the degree of volunteerism will be. If a vaccine passport is required for essential travel, such as business trips or visiting sick family members in hospital, and there are no practicable alternatives (such as quarantine or testing), neither the passport nor the vaccine will in reality be voluntary.

Purpose and benefit

Vaccine passports would interfere with privacy. The question is whether the interference would be proportionate. This will partly depend on how effective the passport is in preventing infection, how high the infection rate is, and the specific purposes that the passport is used for. The benefits of vaccine passports would be far less once herd immunity has been achieved than in the midst of a wave of infection. A mandatory vaccine passport for cancer nurses would be better targeted and less restrictive than vaccine passports for bus travel, for example.

Potential for surveillance

The passport must link vaccination status to identity. Identifying oneself is nothing new when catching a flight or passing through border control. However, comprehensive requirements for a vaccine passport domestically would make digital ID checks far more



widespread. If health data had to be disclosed in order to be permitted to move around freely, the boundaries as regards what information is considered to be public would also be pushed back.

China has gone further than most in this direction. The [mandatory](#) infection tracking system in the country entails almost total surveillance. Individual QR codes with updated health status [determine](#) who is allowed to go to shops or cafés, catch a train or go to work.

There is also a risk of “function creep”. There are many diseases that have caused both society and individuals to incur enormous costs, such as [ordinary seasonal flu](#) and measles. Vaccine passports could easily be extended to cover more vaccines or other health data.

It should therefore be defined in advance when and how a vaccine passport would have to be used and when it should be withdrawn.

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