

# Protocol for exclusion: Why

## COVID-19 vaccine "passports"

## threaten human rights

*This paper is an Access Now publication. It is written by Verónica Arroyo, Raman Jit Singh Chima, and Carolyn Tackett. We would like to thank the Access Now team members who provided support, including Naman M. Aggarwal, Bridget Andere, Juliana Castro, Marwa Fatafta, Fanny Hidvégi, Daniel Leufer, Estelle Massé, Peter Micek, Javier Pallero, and Donna Wentworth. We would also like to thank the [#WhyID](#) community for participating in discussions and providing key insights for this publication. We look forward to receiving feedback and further inputs from experts in digital rights, identity, and health.*



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APRIL 2021

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## I. INTRODUCTION

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More than a year into the fight against the novel COVID-19 virus, as countries and international organizations are working to approve, distribute, and administer vaccines as widely and quickly as possible, we are seeing a growing number of proposals for digital vaccine certificates, also referred to as vaccine “passports.” These proposals aim to digitally link the vaccination status of an individual with a government-provided digital identity or to create a separate digital identity framework for recording and authenticating a person’s vaccination status.

As people around the world get vaccinated and as their vaccination status gets linked to digital identities associated with them, governments and private organizations may allow or disallow access to services and spaces on the basis of an individual’s COVID-19 vaccination status, excluding and discriminating against those who have not received a vaccine. Such initiatives may entail large-scale data collection and processing, as well as the creation of massive databases of people’s sensitive health information. These databases may in turn become a target for cybersecurity attacks, lead to data leaks and exposure, or even enable forms of mass surveillance. The global severity of the COVID-19 pandemic and the concerns digital vaccine certificates raise make their use an urgent human rights issue that is likely to have a profound impact on societies worldwide.

This report is a continuation of Access Now’s ongoing analysis of the human rights impacts of national digital identity programs, biometrics, and early proposals for digital health certificates.<sup>1</sup> In this paper, we analyze the impact of COVID-19 digital vaccination certificates on human rights from both a global perspective and through specific case studies. We do not seek to analyze or comment on how vaccines outside the context of COVID-19 are processed or documented.

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<sup>1</sup>Access Now. National Digital Identity Programmes What’s Next? March 2018.  
<https://www.accessnow.org/cms/assets/uploads/2018/03/Digital-Identity-Paper-digital-version-Mar20.pdf>;  
Access Now. The impact of COVID-19 digital health certificates. July 2020.  
<https://www.accessnow.org/WhyID-COVID-19-digital-health-certificates>.

## II. WHAT IS NEW ABOUT COVID-19 VACCINE “PASSPORTS”?

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While public health authorities have many years of experience issuing vaccine certificates and maintaining vaccine record-keeping systems, many have insisted upon the need for a “digitized” response to COVID-19 vaccine distribution. Techno-solutionism — the idea that new technology is always the best solution — has been the hallmark of COVID-19 response around the world, from the push for contact tracing apps to early attempts at digital “immunity” certificates.<sup>2</sup>

In implementing new technologies, it is always essential to clearly establish the problem we aim to solve, whether a particular tool is the best choice for addressing that problem, what the intended and unintended consequences may be, and what safeguards are in place to protect people. In the context of COVID-19 vaccine distribution, a strong data protection framework is critically important.<sup>3</sup>

### A. STANDARD VACCINE CERTIFICATES

Vaccine certificates are an existing method of tracking and proving an individual's vaccination status, such as the certificate for yellow fever vaccination used in international travel under the International Health Regulations (IHR) administered by the World Health Organization (WHO).<sup>4</sup>

Beyond a certificate serving as proof of a person's vaccination status, it also contributes to distributing agencies' ability to document progress, avoid duplicate vaccinations, and facilitate proper administration of multi-dose vaccines.

Current systems designed exclusively to maintain vaccination records are widely used around the world. They are administered by public health professionals, and are limited in their scope. In contexts where access to travel or public services is made dependent on producing a

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<sup>2</sup> Access Now. Privacy and public health: the dos and don'ts for COVID-19 contact tracing apps. May 2020. <https://www.accessnow.org/privacy-and-public-health-the-dos-and-donts-for-covid-19-contact-tracing-apps/>; Access Now. The impact of COVID-19 digital health certificates. July 2020. <https://www.accessnow.org/WhyID-COVID-19-digital-health-certificates>.

<sup>3</sup> Access Now. Recommendations on privacy and data protection in the fight against COVID-19. March 2020. <https://www.accessnow.org/covid19-data-protection/>.

<sup>4</sup> World Health Organization. International Health Regulations. 2005. [https://www.who.int/health-topics/international-health-regulations#tab=tab\\_1](https://www.who.int/health-topics/international-health-regulations#tab=tab_1).

vaccine certificate — for example, in public education — those restrictions are established through clear legal or public policy frameworks and are matched with programs ensuring equitable access to the required vaccine.<sup>5</sup>

## **B. THE RACE TO “DIGITAL TRANSFORMATION”: COVID-19 DIGITAL VACCINE CERTIFICATE PROPOSALS**

In the context of COVID-19, many actors are proposing to go beyond existing vaccine certificate protocols issued by public health authorities. They seek to develop systems for digital vaccine certificates — often referred to as vaccine “passports,” COVID-19 “passes,” or “smart” vaccination certificates — to record and track recipients of COVID-19 vaccines using information and communications technology (ICT) tools and digital records.

In contrast to other vaccine certificates where the goal is to document vaccination for health purposes, the main objective behind developing a COVID-19 digital vaccine certificate is economic. In a rush to bolster economic activity, and to capture the market for development and deployment of a new technological tool, travel and entertainment industry lobby groups and other private sector interests have been at the forefront of these efforts.<sup>6</sup>

These proposals typically involve developing some kind of smartphone application or QR code designed to serve as a person’s proof of vaccination status, and often also integrate additional functions such as features to manage vaccination appointments or report symptoms following vaccination. They also typically encourage connecting vaccination status

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<sup>5</sup> One example is the work of the Centers for Disease Control and Prevention, a health protection agency in the United States. This agency manages the immunization information systems that collect vaccination information from different health centers and provides information about vaccination status to patients and authorized professionals. See: <https://www.cdc.gov/vaccines/programs/iis/about.html>.

<sup>6</sup> See examples in this blog post on the Good Health Pass: “Good Health Pass: A New Cross-Sector Initiative to Restore Global Travel and Restart the Global Economy”:  
<https://medium.com/id2020/good-health-pass-a-new-cross-sector-initiative-to-restore-global-travel-and-restart-the-global-8b59eb1050a0>. The same economy-based message is reflected on the website for the Common Pass initiative: <https://commonpass.org/our-vision>. In Denmark, we see similar economic arguments in a government website promoting the Corona Pass: “With a valid Corona Pass, you will eventually be able to access cafés, restaurants, and cultural offerings. You must also use the passport if you, for example, are going to the hairdresser, masseur, or traveling” (Access Now translation):  
<https://rn.dk/sundhed/patient-i-region-nordjylland/coronavirus/information-om-coronapas>.

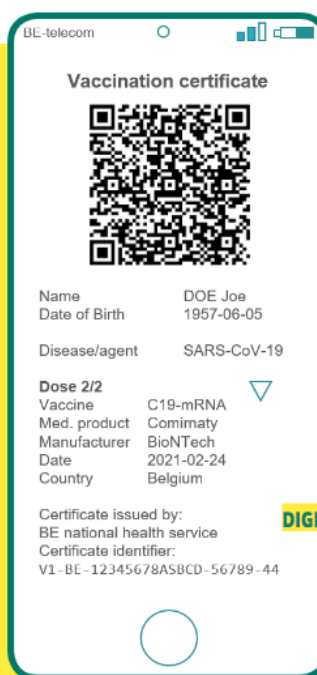
and related sensitive health information with other data sets, including legal identity systems.<sup>7</sup>

## WHAT IS THE DIGITAL GREEN CERTIFICATE?

A Digital Green Certificate is a digital proof that a person:

- ✓ has been vaccinated against COVID-19, or
- ✓ has received a negative test result, or
- ✓ has recovered from COVID-19.

- › Digital and/or paper format
- › With QR code
- › Free of charge
- › In national language and English
- › Safe and secure
- › Valid in all EU countries



Example of features for an EU digital certificate. It can be used to record vaccination, a negative COVID-19 test result, or having recovered from COVID-19.<sup>8</sup>

<sup>7</sup> The European Union will use a QR model for the digital vaccine certificate, similar to Israel's Green Pass, for which people can apply on the web, the Traffic Light (Ramzor) App, or via phone call: <https://corona.health.gov.il/en/directives/green-pass-info/>. Another example is the approach in Denmark, which uses the MinSundhed app and the public health website sundhed.dk to give access to the Corona Pass which is linked to the digital identity of the individual. This certificate is also available on paper: <https://www.thelocal.dk/20210406/corona-passport-what-you-need-to-know-about-danish-covid-19-vaccine-and-test-documentation/>. The Immitee Health Passport is a Malaysian tool that is built on blockchain and will be used in Singapore. This "passport" will use a QR that contains all the vaccine-related information for the individual and can be unlocked using the individual's private "key": <https://www.mobihealthnews.com/news/apac/malaysia-s-first-health-passport-immitee-formally-accepted-singapore>. Finally, other countries, such as Bahrain, are adapting previous COVID-19 apps, such as the BeAware app, to store vaccine information in a QR form: <https://www.mobihealthnews.com/news/emea/bahrain-launches-digital-covid-19-vaccine-passport>.

<sup>8</sup> European Union. Digital Green Certificate. [https://ec.europa.eu/commission/presscorner/detail/en/fs\\_21\\_1208](https://ec.europa.eu/commission/presscorner/detail/en/fs_21_1208)

Many proponents of digital vaccine certificates argue that there is a heightened need to prevent people from using fraudulent vaccination records to access public spaces beyond what is available through existing record systems, and that individuals ranging from customs and border control agents to small business owners should be able to verify your vaccine status against a central database before allowing you entry.<sup>9</sup> Many app-based digital vaccine certificates also offer as selling points additional features that are often already available through standalone services — such as reminders about appointments and when the next dose is due, tracking vaccine side effects, and offering medical follow-up.<sup>10</sup>

However, it is not clear that existing infrastructure for vaccine certification is insufficient for the needs related to distributing and verifying recipients of COVID-19 vaccines, nor that digital certificates would necessarily add value from a public health perspective. Further, the current landscape surrounding COVID-19 vaccines is full of uncertainty. We do not know which countries will recognize various vaccines, the impact of new COVID-19 variants, the efficacy of vaccination in reducing transmission, how long a vaccine will be effective, and more. This is not a stable foundation upon which to build digital infrastructure. If digital vaccine certificate systems are designed without careful consideration of potential harms, the consequences for human rights could be severe and extend well beyond the current public health crisis.

### III. RISK OF EXCLUSION AND DISCRIMINATION

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COVID-19 has imposed the highest toll on individuals and communities who have long been marginalized and underserved, affecting their exposure to the disease, access to adequate healthcare, physical and mental wellbeing during lockdowns, economic stability, access to education, and more.<sup>11</sup> **Many digital vaccine certificate proposals currently being developed or under consideration would perpetuate rather than mitigate these harms.**

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<sup>9</sup> See Heilweil, Rebecca. Everything you need to know about vaccine passports. March 31, 2021.

<https://www.vox.com/recode/22349266/vaccine-passports-vaccination-record-commpass-walmart-walgreens>.

<sup>10</sup> See, for example, Centers for Disease Control and Prevention. V-safe After Vaccination Health Checker. Updated April 1, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/vsafe.html>.

<sup>11</sup> University of Illinois, Chicago. COVID-19: The Disproportionate Impact on Marginalized Populations. April 29, 2020. <https://socialwork.uic.edu/news-stories/covid-19-disproportionate-impact-marginalized-populations/>; Ferreira, Francisco and Marta Schoch. Covid-19 in Latin America: A pandemic meets extreme inequality. June 10, 2020.

<https://blogs.worldbank.org/developmenttalk/covid-19-latin-america-pandemic-meets-extreme-inequality>.



It is imperative that policymakers prioritize protecting the rights and needs of people who are most vulnerable in any plans for vaccine distribution and certification, in particular when a demand to certify vaccination would impact people's access to fundamental rights and freedoms.

## A. UNEQUAL ACCESS TO VACCINATIONS

Many people around the world are still waiting for access to a COVID-19 vaccine. While some countries have secured vaccines for their entire population, others have only a partial supply or have not yet even begun vaccination programs.<sup>12</sup>

Even in the countries that are rolling out a vaccination program, governments are facing significant distribution challenges, including limited capacity for population mapping, access to cold chains and transportation, and trained human resources. Distribution is especially challenging in communities that already lack the necessary infrastructure and access to essential services.<sup>13</sup> This means that marginalized and vulnerable populations — the poor, the stateless, migrants, and refugees, among others — will likely be among the last to receive vaccinations, if they are able to get them at all. Moreover, even individuals in communities with easy access to the vaccine may not be able to get it due to medical conditions or other restrictions public health authorities put in place.

Several countries identify the primary use for digital vaccine certificates, apart from tracking vaccinations, is to grant or deny people access to travel, workplaces, and social services. These systems are therefore likely to push people who already face exclusion and discrimination further to the margins. **Whatever their circumstances, someone who is unable to get a vaccine should not be penalized by restrictions on access to spaces and services based on their vaccination status.**

## B. RESTRICTIONS TO FREEDOM OF MOVEMENT AND CROSS-BORDER TRAVEL

Many stakeholders interested in facilitating a return to pre-pandemic levels of travel — from hotels and airline companies to governments whose economies rely heavily on tourism — are

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<sup>12</sup> BBC. Covid vaccine tracker: How's my country and the rest of the world doing? February 2021. <https://www.bbc.com/news/world-56025355>.

<sup>13</sup> Zaman, Rashis and Jayne Webster. Meet the challenges: Rolling out Covid-19 vaccination in low- and middle-income countries. February 2021. <https://www.opml.co.uk/blog/meet-challenges-rolling-out-covid-19-vaccination-low-middle-income-countries>.

pushing proposals for digital vaccine certificates that could form the basis of access to or denial from international travel.<sup>14</sup> Coalitions of companies, governments, and technologists are coordinating to standardize such certificates through jointly developed tools and protocols.<sup>15</sup>

The World Health Organization itself initially considered developing “e-vaccination certificates” for travel as part of its coordination with Estonia to establish a “digital yellow card” focused on portability and smooth cross-border exchange of vaccination data.<sup>16</sup> However, after further research, the WHO released an interim position paper on February 5, 2021, stating that “national authorities and conveyance operators should not introduce requirements of proof of COVID-19 for international travel as a condition for departure or entry, given that there are still critical unknowns regarding the efficacy of vaccination in reducing transmission.”<sup>17</sup> The WHO has also noted that the limited availability of vaccines will negatively affect individuals who cannot get access to a vaccine if they are therefore barred from travel.<sup>18</sup>

While there is precedent for requiring vaccine certificates for travel to specific countries — for example, the yellow fever vaccination required when traveling between countries with

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<sup>14</sup> Schengenvisainfo. Greece Urges EU to Create “Vaccination Certificate” to Facilitate Travel. January 2021. <https://www.schengenvisainfo.com/news/greece-urges-eu-to-create-vaccination-certificate-to-facilitate-travel/>; IATA. IATA Travel Pass Initiative. <https://www.iata.org/en/programs/passenger/travel-pass/>.

<sup>15</sup> See COVID Credential Initiative. <https://www.ledgerinsights.com/sovereign-identity-covid-19-immunity-passports-credentials/>; Good Health Pass. <https://www.goodhealthpass.org/wp-content/uploads/2021/02/Good-Health-Pass-Collaborative-Principles-Paper.pdf>.

<sup>16</sup> Miller, John and Stephanie Nebeha. WHO looks at possible “e-vaccination certificates” for travel. December 2020. <https://www.reuters.com/article/health-coronavirus-who-passports-int/who-looks-at-possible-e-vaccination-certificates-for-travel-idUSKBN28D1IQ>; ERR. Estonia and World Health Organization digitally sign cooperation agreement. October 2020. <https://news.err.ee/1143517/estonia-and-world-health-organization-digitally-sign-cooperation-agreement>.

<sup>17</sup> World Health Organization. Interim position paper: considerations regarding proof of COVID-19 vaccination for international travellers. February 2021. <https://www.who.int/news-room/articles-detail/interim-position-paper-considerations-regarding-proof-of-covid-19-vaccination-for-international-travellers>.

<sup>18</sup> Additionally, the WHO launched the Smart Vaccination Certificate Working Group which is supporting WHO’s efforts to release an Interim guidance for developing a Smart Vaccination Certificate that will support states in adopting interoperability standards for digital vaccines certificates. The proposal is receiving feedback from the community and is intended to be used for COVID-19 and other vaccinations in the future. See: <https://www.who.int/news-room/articles-detail/call-for-public-comments-interim-guidance-for-developing-a-smart-vaccination-certificate-release-candidate-1>.

differing levels of exposure — the current proposals for COVID-19 digital vaccine certificates operate on a bigger scale and impact many more people. COVID-19 is a pandemic, not a disease like yellow fever that is endemic to certain countries.<sup>19</sup>

While many proponents of vaccine “passports” are focused on restoring tourism, making these certificates mandatory for travel would have severe consequences for individuals crossing borders out of necessity, such as refugees, migrants, and people who travel to get specialized medical care. They would also systematically disadvantage everyone around the world living in countries with limited access to COVID-19 vaccines.

## Case Studies

<b>European Union</b>	<p>On March 17, 2021, the European Commission introduced plans for a Digital Green Certificate to facilitate cross-border movement within the European Union.<sup>20</sup> The certificate would be available in digital or paper form and would serve as “proof that a person has either been vaccinated against COVID-19, received a negative test result, or recovered from COVID-19.”<sup>21</sup></p> <p>EU member states would be responsible for issuing the certificate and for maintaining a secure database to store the personal data associated with each certificate’s unique QR code.<sup>22</sup> However, member states have already demonstrated varying levels of commitment to privacy in the rollout of COVID-19 contact tracing and exposure notifications, and more broadly, many member states have failed to effectively implement the General Data Protection Regulation (GDPR) in their own jurisdictions.<sup>23</sup></p>
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<sup>19</sup> World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19 -11. March 2020.

<https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.

<sup>20</sup> European Commission. COVID-19: Digital green certificates.

[https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/covid-19-digital-green-certificates\\_en](https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/covid-19-digital-green-certificates_en).

<sup>21</sup> Id.

<sup>22</sup> Id.

<sup>23</sup> Access Now. Two years under the EU GDPR: An implementation progress report. May 2020.

<https://www.accessnow.org/two-years-gdpr-report>.

In this context, an EU-level digital vaccine certificate scheme aimed, as the EU Commission President Ursula von der Leyen described it, to enable Europeans “to move safely in the European Union or abroad — for work or tourism,” raises serious questions about both its design and implementation.<sup>24</sup> The system presents issues for fundamental rights ranging from data protection and privacy to the right to non-discrimination and freedom of movement, as well as technical challenges.<sup>25</sup>

Member states have also responded to the proposal of EU digital vaccine certificates with varying degrees of acceptance.<sup>26</sup> Germany, for example, has been a strong supporter and is already investing in development of supporting technical infrastructure.<sup>27</sup> But senior officials in Belgium have firmly opposed the use of vaccine certificates to regulate travel and access to spaces due to unequal access to vaccines and discrimination concerns.<sup>28</sup> The Belgian data protection authority also warned about risks related to the storage, retention period, and sharing of information in case of a vaccination database.<sup>29</sup> Several EU countries have also suggested that they may use such a certificate, not just for cross-border travel but also to allow or disallow access to restaurants, museums, or cinemas, thus increasing risks of discrimination.<sup>30</sup>

The European Commission and national governments should learn from the experiences with exposure notification applications and focus on an equitable and fast distribution of vaccines rather than launching untested

<sup>24</sup> Tweet of Ursula von der Leyen. March 1, 2021. <https://twitter.com/vonderleyen/status/1366346729289904128>.

<sup>25</sup> Liboreiro, Jorge. EU vaccine passports might not be ready by the summer. Here's why. March 2021. <https://www.euronews.com/2021/03/03/eu-vaccine-passports-might-not-be-ready-by-the-summer-here-s-why>.

<sup>26</sup> Deutsche Welle. EU coronavirus summit: Vaccine certificates expected by summer. February 25, 2021. <https://www.dw.com/en/eu-coronavirus-summit-vaccine-certificates-expected-by-summer/a-56701869>.

<sup>27</sup> Deutsche Welle. Most Germans keen on COVID vaccination passport. February 2021. <https://www.dw.com/en/most-germans-keen-on-covid-vaccination-passport/a-56723289>; Tweet of Frederike Kalthener. March 9, 2021. [https://twitter.com/F\\_Kalthener/status/1369278833447337986](https://twitter.com/F_Kalthener/status/1369278833447337986).

<sup>28</sup> Tweet of Sophie Wilmès. March 1, 2021. [https://twitter.com/Sophie\\_Wilmes/status/1366380299995795458](https://twitter.com/Sophie_Wilmes/status/1366380299995795458).

<sup>29</sup> Belgium Data Protection Authority, Opinion n° 138/2020. December 18, 2020 (Originally in French) <https://www.autoriteprotectiondonnees.be/publications/avis-n-138-2020-du-18-decembre-2020.pdf>.

<sup>30</sup> The Brussels Times. EU divided on Covid-19 “vaccination passports” for travel. February 2021. <https://www.brusselstimes.com/news/eu-affairs/154120/eu-divided-covid-19-vaccination-passports-travel-com-mission-von-der-leyen-michel-mandatory-airlines-who/>.

	technology-based schemes. <sup>31</sup> We further recommend that EU legislators follow the recently published guidance of the Data Protection Authorities if and when they consider such certificates. <sup>32</sup>
<b>Spain</b>	In addition to the EU Digital Green Certificate proposal — and in some cases, in response — some states are adopting their own national-level approaches to digital vaccine certificates for travel. <sup>33</sup> Spain, for example, has proposed combining the EU-level digital vaccine certificate with a “reversed vaccine passport” that would collect information about why a person has not been vaccinated, whether due to a personal decision, failure in the system, or an inability to get an appointment. <sup>34</sup> Spanish government officials indicated that the registry would “not be made public and [would] be done with the utmost respect for the legislation on data protection.” <sup>35</sup> However, they have also indicated plans to share the data with “other European partners.” <sup>36</sup> Spain is among the EU countries that heavily rely on tourism, and many such

<sup>31</sup> Jonker, Willem. Covid-19 - why didn't Europe's contact tracing apps work? February 2021. <https://euobserver.com/opinion/150813>; Wetsman, Nicole. Contact tracing apps promised big and didn't deliver. December 2020.

<https://www.theverge.com/22168473/coronavirus-contact-tracing-apps-exposure-notification-covid-google-app>le.

<sup>32</sup> European Data Protection Board. EDPB-EDPS Joint Opinion 04/2021 on the Proposal for a Regulation of the European Parliament and of the Council on a framework for the issuance, verification and acceptance of interoperable certificates on vaccination, testing and recovery to facilitate free movement during the COVID-19 pandemic (Digital Green Certificate). March 2021.

[https://edps.europa.eu/system/files/2021-04/21-03-31\\_edpb\\_edps\\_joint\\_opinion\\_digital\\_green\\_certificate\\_en\\_0.pdf](https://edps.europa.eu/system/files/2021-04/21-03-31_edpb_edps_joint_opinion_digital_green_certificate_en_0.pdf).

<sup>33</sup> The Brussels Times. EU divided on Covid-19 “vaccination passports” for travel. February 11, 2021.

<https://www.brusselstimes.com/news/eu-affairs/154120/eu-divided-covid-19-vaccination-passports-travel-com-mission-von-der-leyen-michel-mandatory-airlines-who/>.

<sup>34</sup> El País. Spain's government pinning hopes on a vaccination passport to help kick-start ailing tourism sector. February 9, 2021.

[https://english.elpais.com/economy\\_and\\_business/2021-02-09/spains-government-pinning-hopes-on-a-vaccination-passport-to-help-kick-start-ailing-tourism-sector.html](https://english.elpais.com/economy_and_business/2021-02-09/spains-government-pinning-hopes-on-a-vaccination-passport-to-help-kick-start-ailing-tourism-sector.html); Wheaton, Sarah. Spain to share coronavirus vaccine-refusal registry with EU countries. December 29, 2020.

<https://www.politico.eu/article/spain-coronavirus-vaccine-refusal-registry-with-eu-countries/>.

<sup>35</sup> Kassam, Ashifa. Spain will register people who refuse Covid vaccine, says health minister. December 29, 2020.

<https://www.theguardian.com/world/2020/dec/29/spain-to-keep-registry-of-people-who-refuse-covid-vaccine>.

<sup>36</sup> Wheaton, Sarah. Spain to share coronavirus vaccine-refusal registry with EU countries. December 29, 2020.

<https://www.politico.eu/article/spain-coronavirus-vaccine-refusal-registry-with-eu-countries/>.

	<p>countries are eager to put systems in place to facilitate cross-border travel ahead of the summer vacation season.</p>
<p><b>African Union</b></p>	<p>The African Union (AU), together with the Africa Centres for Disease Control and Prevention (Africa CDC), has additionally created a digital platform called Trusted Travel for “managing passenger travel in line with country COVID-19 guidelines.”<sup>37</sup> The AU and Africa CDC identified several key objectives for the project, including harmonized COVID-19 testing certification for land, sea, and air border crossing across Africa; “[e]nhanced surveillance at business points such as hotels, tourist sites, etc.”; and “[m]utual recognition and cross-border information exchange for enhanced surveillance.”<sup>38</sup> Africa CDC also indicates the system would be used for the yellow fever vaccine and other health records beyond those necessary for combating COVID-19, signaling the intention is to implement a permanent infrastructure for maintaining and monitoring sensitive health data across the continent.<sup>39</sup></p> <p>Airlines including Kenya Airways,<sup>40</sup> Ethiopian Airlines, and ASKY<sup>41</sup> are already using the platform to verify passengers’ vaccination status. As it stands, this information will be incorporated into the respective airlines’ apps, giving the airlines unprecedented access to their passengers’ health data, including testing and vaccination records. The Africa CDC proposal envisions the platform also being integrated with “hotels, taxi hailing companies and access control systems.”<sup>42</sup> This raises significant questions around data</p>

<sup>37</sup> Africa CDC. Trusted Travel. <https://africacdc.org/trusted-travel/>.

<sup>38</sup> African Union and Africa CDC. Africa against COVID-19. [https://au.int/sites/default/files/documents/39349-doc-africa-cdc-saving-lives-economies-livelihoods-pamphlet-eng\\_1.pdf](https://au.int/sites/default/files/documents/39349-doc-africa-cdc-saving-lives-economies-livelihoods-pamphlet-eng_1.pdf).

<sup>39</sup> Africa CDC. Trusted Travel. <https://africacdc.org/trusted-travel/>.

<sup>40</sup> Kenya Airways. Trusted travel program. <https://www.kenya-airways.com/en-ke/trusted-travel-program>.

<sup>41</sup> Ngila, Faustine. How Africa digital Covid passport will ease travel. March 31, 2021. <https://www.businessdailyafrica.com/bd/corporate/shipping-logistics/how-africa-covid-passport-will-ease-travel-3342474>.

<sup>42</sup> African Union and Africa CDC. Africa against COVID-19. [https://au.int/sites/default/files/documents/39349-doc-africa-cdc-saving-lives-economies-livelihoods-pamphlet-eng\\_1.pdf](https://au.int/sites/default/files/documents/39349-doc-africa-cdc-saving-lives-economies-livelihoods-pamphlet-eng_1.pdf).

	<p>protection failures, surveillance, and other potential abuses of the data generated on the platform.</p> <p>Even further, this initiative envisions a situation where it only recognizes vaccines administered by “authorized laboratories” listed in a central database and has vaccination compliance guidelines that may leave people unable to travel if their locally available vaccine or vaccine administrators are not recognized or documented in the centralized system.</p>
<b>Gulf Cooperation Council</b>	<p>In February 2021, health officials from the Gulf Cooperation Council (GCC) started discussions around issuing a unified COVID-19 “health passport” which would become a prerequisite for travel and movement between Gulf countries.<sup>43</sup></p> <p>While the outcomes of these discussions are yet to be announced, the state-owned airline Qatar Airways announced the first fully COVID-19 vaccinated flight, “carrying only vaccinated crew and passengers onboard.”<sup>44</sup> The airline also announced in early April that it will use the International Air Transport Association (IATA)’s Travel Pass mobile application. Likewise, the UAE’s two airlines, Etihad and Emirates Airlines, announced their cooperation with IATA to use the application.<sup>45</sup> Through the app, travelers can create a “digital passport” which allows them to share their COVID-19 test results and vaccination certificates data with the relevant authorities.<sup>46</sup></p>

### C. REDUCED ACCESS TO SERVICES AND PUBLIC SPACES

In addition to contemplating use of vaccine “passports” for travel across national borders, countries such as Israel and Denmark, as well as local governments like New York State in the

<sup>43</sup> Khaleej Times. Covid-19: Unified GCC health passport in the works. February 26, 2021.

<https://www.khaleejtimes.com/region/mena/covid-19-unified-gcc-health-passport-in-the-works>.

<sup>44</sup> Qatar Airways. Qatar Airways to Operate World’s First Fully COVID-19 Vaccinated Flight. April 6, 2021.

<https://www.qatarairways.com/en/press-releases/2021/April/Worlds-First-Vaccinated-Flight.html>.

<sup>45</sup> Arabian Business. Etihad to launch coronavirus health passports from Abu Dhabi hub 'very soon'. March 15, 2021.

<https://www.arabianbusiness.com/transport/460319-etihad-to-launch-health-passports-from-abu-dhabi-hub-very-soon>.

<sup>46</sup> IATA Travel Pass Initiative. <https://www.iata.org/en/programs/passenger/travel-pass/>.

U.S. (where vaccination is optional), are pushing the use of digital vaccine certificates to deny or grant access to services and spaces domestically. These proposals pose the greatest threat of interfering with fundamental rights.

These restrictions may impact people's ability to access essential services, pursue their livelihood, and participate in civic life. People who have a health condition or cannot be vaccinated due to other restrictions imposed by health authorities will likely face exclusion, along with those who are unable to access the internet or an internet-connected device. Unless there are clear safeguards to prevent it, use of digital vaccine certificates may interfere with the freedom of peaceful assembly and association, and could block essential movement for social, racial, economic, and environmental justice.

**Although public health constitutes a legitimate purpose to limit the exercise of some rights, those in power must not impose digital vaccine certificate schemes that can be leveraged to silence dissent, suppress social movements, or impose additional burdens on at-risk individuals who are already targeted and underserved.**

Even if a government does not formally mandate use of digital vaccine certificates for access to services, private actors may start requiring them on their own initiative. In India, for example, pharmacy owners appropriated the Aarogya Setu COVID-19 exposure notification app for unofficial use, restricting people from entering their stores unless they showed they had installed the app on their phone.<sup>47</sup> This kind of response to digital vaccine certificates could result in many more instances of discrimination, both purposeful and unintended.

## Case Studies

<b>Israel</b>	The Israeli government has rolled out the Green Pass, a document that allows vaccinated people and those recovered from COVID-19 to access a wide range of businesses and facilities. The document contains a QR code that can be scanned to verify its validity. People who meet the requirements can apply to get a Green Pass on a government website, on the Traffic Light (Ramzor) app, or
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<sup>47</sup> Dixit, Pranav. For A Billion Indians, The Government's Voluntary Contact Tracing App Might Actually Be Mandatory. April 30 2020. <https://www.buzzfeednews.com/article/pranavdixit/for-a-billion-indians-the-governments-voluntary-contact>.



	<p>via a telephone call. The Green Pass will be valid for six months if the person was vaccinated.<sup>48</sup></p> <p>The biggest concern regarding the Green Pass is the exclusion it facilitates. In January 2021, Health Minister Yuli Edelstein said, “Whoever does not get vaccinated will be left behind.”<sup>49</sup> As of April 2021, these words are becoming reality even if vaccination is still voluntary. The Green Pass is excluding people who cannot get vaccinated due to a medical condition or other restriction imposed by the health authority. These people cannot go to work unless they get agreement from an employer, nor can they access public spaces, gyms, restaurants, movie theaters, or music venues.<sup>50</sup> This includes minors under the age of 16 who cannot get vaccinated.<sup>51</sup></p> <p>Another concern is the security and reliability of the digital vaccine certificate. A cybersecurity firm has already claimed that the Green Pass can easily be forged. This is done by making a QR code independently, including it in any text, and grafting it onto the certificate.<sup>52</sup></p>
<b>Denmark</b>	<p>Denmark is one of the first European countries to introduce a certificate that enables the individual to access multiple services. Coronapas is a document that certifies a person has been fully vaccinated, tested negative, or has had COVID-19 and earned “immunity.”<sup>53</sup></p> <p>The Coronapas can be accessed through the MinSundhed app and the public health website sundhed.dk and is linked to the NemID digital identity system.</p>

<sup>48</sup> Corona Health Gov. What is a Green Pass? <https://corona.health.gov.il/en/directives/green-pass-info/>.

<sup>49</sup> Ayyub, Rami and Steven Scheer. Left out? Israeli vaccine refuseniks fear exclusion as economy reopens. February 26, 2021. <https://www.reuters.com/article/us-health-coronavirus-israel-vaccinated-idUSKBN2AQ0XO>.

<sup>50</sup> Kellman, Laurie. Vaccination “passports” may open society, but inequity looms. February 26, 2021. <https://apnews.com/article/coronavirus-vaccination-passports-7a8ce11ce37c309d97969ab71df26e62>.

<sup>51</sup> CGTN Europe. How is Israel’s “vaccine passport” working - and should Europe follow? April 5, 2021. <https://www.youtube.com/watch?v=VB3XjOIlul0>.

<sup>52</sup> Bar-Zik. Despite warnings, anyone can still fake Israel’s coronavirus vaccination certification. February 18, 2021. <https://www.haaretz.com/israel-news/tech-news/.premium-anyone-can-still-fake-israel-s-coronavirus-vaccination-certification-1.9549889>.

<sup>53</sup> Sundhed.dk. Frequently asked questions about Coronapas - Covid-19 vaccination. <https://www.sundhed.dk/borger/corona/coronapas/faqvaccinepas/>.

	<p>People who are vaccinated but do not have a NemID receive the certificate by email or mail.</p> <p>As of April 2021, having a Coronapas allows an individual to enter beauty salons and driving schools, and the government expects to add other services to the list, such as restaurants, museums, cinemas, and theaters.<sup>54</sup></p> <p>Besides excluding people who cannot get vaccinated, Denmark is fining businesses and individuals who do not comply with Coronapas protocols. Businesses risk a fine up to approximately 7,000 USD and individuals a fine of 390 USD.<sup>55</sup> These measures are discriminatory and disproportionate to their aim.</p>
<b>United States</b>	<p>New York State has released the Excelsior Pass, a voluntary digital certificate to show a person has been vaccinated or has tested negative for COVID-19.<sup>56</sup></p> <p>People can retrieve this certificate from the Excelsior Pass Wallet app or website. The certificate includes a QR code that businesses and public venues can scan to verify its authenticity, and a person must also show a photo ID to verify that the pass belongs to them. The Excelsior Pass grants individuals access to major stadiums, events, and arts venues, and more businesses will soon be added to the list. Although the government is putting a lot of effort into making the Excelsior Pass a success, it is drawing criticism. The executive director of a tech project claims that he got an Excelsior Pass using another person's publicly available information.<sup>57</sup></p>

<sup>54</sup> Euronews. Denmark among first in Europe to introduce COVID pass scheme. April 6, 2021. <https://www.euronews.com/2021/04/06/covid-19-denmark-launches-coronapas-certificate-to-reopen-economy>.

<sup>55</sup> France 24. Denmark launches "corona pass" to facilitate reopening. April 6, 2021. <https://www.france24.com/en/live-news/20210406-denmark-launches-corona-pass-to-facilitate-reopening>.

<sup>56</sup> New York State. Excelsior Pass. <https://covid19vaccine.health.ny.gov/excelsior-pass>.

<sup>57</sup> Fowler, Geoffrey. We tested the first state "vaccine passport." Here's what worked - and didn't. April 9, 2021. <https://www.washingtonpost.com/technology/2021/04/08/vaccine-passport-new-york-excelsior-pass/>.

In contrast to this approach, the U.S. states of Florida and Texas are banning use of vaccine certificates by state agencies and businesses to grant people access to services. Leaders of these state governments have also consistently downplayed the severity of the COVID-19 pandemic, which may have informed their decisions to ban the certificates.

## D. ADMINISTRATIVE BURDEN

A global vaccination drive in the middle of a pandemic is a challenge, to say the least. The logistics, the politics, and the resources required make this an unenviable task for the agencies responsible. If we add to this the integration of a parallel infrastructure for digital vaccine certificates, the task becomes more complicated, and potentially more expensive.

Consider a hypothetical vaccination drive in a village in Jharkhand in India. There are a huge number of people waiting their turn to get the vaccine, after more than a year of lockdowns, lost jobs, loss of family members, friends, or colleagues to COVID-19, and other kinds of distressing situations. The internet is down, or has been deliberately cut off due to unrelated security concerns.<sup>58</sup> The administrator of the vaccine is required not only to vaccinate people, but to authenticate their identity, create their unique identity on the Co-WIN platform, and log their vaccination status.<sup>59</sup> With no internet, the drive is halted until connectivity is restored. The lack of functioning technological infrastructure means that even though both people and vaccines are present, people are leaving unvaccinated. This kind of scenario already plays out in India when people who do not have a digital ID or cannot be authenticated do not get access to food rations and other government benefits.<sup>60</sup>

**Governments and international organizations must make sure that unnecessary administrative barriers do not hinder vaccine distribution.** Digital vaccine certificates should not become a barrier to public health objectives or lead to discriminatory outcomes for people who are not connected or are deliberately disconnected from the internet.

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<sup>58</sup> Access Now. #KeepItOn report: India shuts down internet more than any other nation on earth. March 3, 2021. <https://www.accessnow.org/keepiton-report-india-shuts-down-internet-more-than-any-other-nation-on-earth/>.

<sup>59</sup> Access Now. Who wins by linking Co-WIN to Aadhaar? February 17, 2021. <https://www.accessnow.org/india-cowin-app/>.

<sup>60</sup> Rethink Aadhaar. Exclusion. January 17, 2018. <https://rethinkaadhaar.in/testimonials>; Gupta, Aarushi. Proposing a Framework to Document Exclusion in Direct Benefit Transfers. February 11, 2021. <https://www.dvara.com/blog/2021/02/11/proposing-a-framework-to-document-exclusion-in-direct-benefit-transfers/>.

## IV. PRIVACY AND SECURITY CONCERNS

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Most digital vaccine certificates currently under consideration would significantly expand the amount of data collected about a person's vaccination status, as well as generating ongoing new data about, for example, when and where the person has used the certificate. This opens the door to both mistakes and abuses that impact people's privacy, and creates a valuable target for cyber attacks. Information from these certificates could also be copied to create fraudulent documents if security standards are not robust enough. These concerns are heightened even further if a digital vaccine certificate is integrated into a centralized digital identity system, or when it would serve as the basis for a new health identity infrastructure.

### A. RISKS OF MASS COLLECTION AND PROCESSING OF HEALTH DATA

Any COVID-19 digital vaccine certificate would likely require the collection of sensitive personal information, putting individuals' privacy at risk. Health information is private and sensitive by nature and reveals intimate details about a person's life. The use, collection, access, and any other processing of this information should be protected, ideally through a comprehensive data protection law.<sup>61</sup> But many countries considering proposals for digital vaccine certificates have either a weak or outdated data protection framework, or none at all. Further, it is important to note that approaches using centralized storage of information — especially without adequate checks and balances for sharing of data within and between governments — can create mammoth yet fragile systems that put both individuals' privacy and data security at risk.

**Governments must approach digital vaccines certificates with caution, acknowledging the unique risks of collecting health-related and other sensitive personal data**, especially when it may be collected, accessed, or processed by people who are not medical professionals.<sup>62</sup> **Further, governments must refrain from using COVID-19 as an excuse to expand mass or targeted surveillance practices. No one should have to compromise their**

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<sup>61</sup> Access Now. Creating a Data Protection Framework: a Do's and Don'ts Guide for Lawmakers. November 2018. <https://www.accessnow.org/data-protection-handbook>.

<sup>62</sup> Given the push to drive mass vaccination for COVID-19, data entry and management for documenting such dosage and vaccination status in several countries may involve frontline workers and volunteers beyond just public health specialists. This is also especially relevant in the context of the previous section, when public officials or even private actors may be tasked with interpreting sensitive health data to determine whether someone can access certain spaces or services.

## fundamental right to privacy in order to maintain access to essential services or freedom of movement.

The collection and use of health data must be grounded in the principles of necessity and proportionality, which may be evaluated through a three-part test.<sup>63</sup> The data collection and use must be:

1. in accordance with or prescribed by law (i.e. the legality principle),
2. necessary to achieve a certain aim (i.e. the necessity principle), and
3. proportionate to the aim pursued (i.e. the proportionality principle).

## Case Studies

<b>Bahrain</b>	<p>The government of Bahrain launched a digital COVID-19 vaccine certificate on February 17, 2021.<sup>64</sup> Citizens and residents of Bahrain who get vaccinated will receive an official vaccination certificate two weeks after being vaccinated with the two doses. The certificate will then be linked to Bahrain’s COVID-19 BeAware app, which was also used at the onset of the global pandemic in 2020 for contact tracing.</p> <p>The BeAware app conveys the immunity status of its user through displaying a “COVID-19 Vaccinated” green shield along with the official certificate, the user’s name, date of birth, nationality, and the type of vaccination received. The application is also used to book vaccination appointments.</p> <p>The repurposing of BeAware to function as a digital vaccine certificate raises serious concerns, as it is a highly privacy-invasive application and was singled out as one of the “most alarming mass surveillance tools” being used as part</p>
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<sup>63</sup> Necessary & Proportionate: On the application of human rights to communications surveillance. <https://necessaryandproportionate.org/>.

<sup>64</sup> Arab News. Bahrain launches digital COVID-19 vaccine passport. February 17, 2021. <https://www.arabnews.com/node/1810926/middle-east>.

	<p>of a COVID-19 response.<sup>65</sup> It tracks the movement of its users in real time and uploads the data location coordinates into a central database.</p>
<p><b>Jamaica</b></p>	<p>Jamaica released in 2020 the JamCOVID app and website, a centralized platform built by Amber Group. This platform shows information about the COVID-19 status in the country, and has tools to self-report symptoms and to obtain pre-approval to visit the country. Visitors upload their travel information and a negative test result to the platform in order to obtain approval.</p> <p>In February 2021, journalist Zack Whittaker broke the news that the cloud storage server containing travelers’ information had been left unprotected without a password.<sup>66</sup> More than 70,000 negative COVID-19 lab results, over 425,000 immigration documents, 440,000 images of travelers’ signatures, and more than 1.1 million check-in videos were open to exposure.<sup>67</sup> The government said that it fixed the problem and there was no evidence the data were exploited.<sup>68</sup> Whittaker then reported two additional security lapses that compromised security keys and quarantine orders. Officials did not respond to his inquiries about the situation.<sup>69</sup> Instead, they initiated a criminal investigation to uncover unauthorized access to the data.<sup>70</sup></p>
<p><b>Singapore</b></p>	<p>Individuals face even greater risk when data collected for a digital vaccine certification is used for purposes other than verifying an individual’s</p>

<sup>65</sup> Samaro, Dima and Marwa Fatafta. COVID-19 contact-tracing apps in MENA: a privacy nightmare. June 18, 2020. <https://www.accessnow.org/covid-19-contact-tracing-apps-in-mena-a-privacy-nightmare/>; Amnesty international. Bahrain, Kuwait and Norway contact tracing apps among most dangerous for privacy. June 16, 2020. <https://www.amnesty.org/en/latest/news/2020/06/bahrain-kuwait-norway-contact-tracing-apps-danger-for-privacy/>.

<sup>66</sup> Whittaker, Zack. Jamaica’s immigration website exposed thousands of travelers’ data. February 17, 2021. <https://techcrunch.com/2021/02/17/jamaica-immigration-travelers-data-exposed/>.

<sup>67</sup> Id.

<sup>68</sup> Jamaica Information Service. JAMCOVID Security Protocols Strengthened. February 17, 2021. <https://jis.gov.jm/jamcovid-security-protocols-strengthened/>.

<sup>69</sup> Whittaker, Zack. How Jamaica failed to handle its JamCOVID scandal. April 3, 2021. <https://techcrunch.com/2021/04/03/jamaica-jamcovid-amber-group/>

<sup>70</sup> Loop Jamaica. Criminal probe underway in JAMCOVID application breach. February 20, 2021. <https://www.loopjamaica.com/content/criminal-probe-underway-jamcovid-application-breach>

vaccination status. In Singapore, law enforcement officials are able to access data gathered through the TraceTogether and SafeEntry contact tracing applications and devices for criminal investigations.<sup>71</sup> This is not what the data was supposed to be used for. Indeed, the government initially said it would only be used for exposure notification and contact tracing.<sup>72</sup> It was only after the news broke that police had used tracing data for a murder investigation that the Singaporean government legally entrenched this use under a fast-tracked law that allows law enforcement access to TraceTogether and SafeEntry data for criminal probes in certain categories of “serious crime.”<sup>73</sup>

## B. ENTRENCHMENT AND PROLIFERATION OF CENTRALIZED DIGITAL IDENTITY SYSTEMS

Many civil society organizations, experts, and coalitions, including the #WhyID community, have been questioning the need for centralized digital identity systems and highlighting their human rights harms for years.<sup>74</sup> Such programs carry risks of surveillance, profiling, exclusion, privacy violations, and cybersecurity threats, among others, yet they are being rapidly deployed around the world, especially in developing countries.<sup>75</sup> **The COVID-19 vaccination drive should not be used to entrench or further advance these dangerous centralized digital identity systems, nor to create new health identity systems.**

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<sup>71</sup> Tarabay, Jamie and Bloomberg. Countries vowed to restrict use of COVID.19 data. For one government, the temptation was too great. February 1, 2021.

<https://fortune.com/2021/02/01/singapore-covid-data-tracetgether-use-law-criminal/>

<sup>72</sup> Baharudin, Hariz. Contact-tracing device will not track location; people can use TraceTogether if they prefer, says Vivian Balakrishnan. June 8, 2020.

<https://www.straitstimes.com/singapore/contact-tracing-device-will-not-track-location-and-people-can-use-tracetgether-if-they>.

<sup>73</sup> Sun, David. TraceTogether dat was accessed in May 2020 for Punggol Fields murder investigation. February 2, 2021.

<https://www.straitstimes.com/singapore/politics/tracetgether-data-was-accessed-in-may-2020-for-punggol-fields-murder>; Lee, Yoolim and Jamie Tarabay. Singapore psses Law to Use Covid Tracing in Criminal probes. February 3, 2021.

<https://www.bloombergquint.com/onweb/singapore-passes-law-to-use-covid-tracing-for-criminal-probes>.

<sup>74</sup> #WhyID. An open letter to the leaders of international development banks, the united Nations, international aid organisations, funding agencies, and national governments. <https://www.accessnow.org/whyid/>

<sup>75</sup> Access Now. National Digital identity programmes: What’s next? March 2018.

<https://www.accessnow.org/cms/assets/uploads/2018/03/Digital-Identity-Paper-digital-version-Mar20.pdf>

One of the most worrying parts of the current paradigm of digital identity systems is the interlinking of various aspects of a person's life under one identity umbrella. Some proponents and governments have sought to have a person's tax records, mobile numbers, ration cards, health data, financial records, driving license, and many other registrations linked under one digital identity system. There is a danger that digital vaccine certificates would grow the tentacles of this "octopus" of identity, adding vaccination status and other sensitive health records.

In developing countries where centralized identity systems are most prevalent, there are many realities which increase their risk. These countries often lack effective data protection regulations and institutions, surveillance standards are generally lax, minimal investment in security infrastructure makes centralized data an easy target for hacks and susceptible to leaks, and weak governance standards do not provide a pathway to remedy for people whose privacy has been violated. This is especially concerning considering that many of these systems use biometrics as their authentication mechanism.

Further, we have seen in many cases that data initially collected for one purpose is often exploited for surveillance or other misuses down the line.<sup>76</sup> Centralized digital identity systems are highly susceptible to mission creep, growing far beyond uses and limitations first envisaged. **It is essential that data regarding a person's vaccination status, or any additional data generated by a digital vaccine certificate (such as the locations a person has shown proof of vaccination), are not weaponized against them.**

Beyond the privacy risks, these centralized mechanisms are highly prone to error, which can leave many — and especially the most vulnerable — without access to essential services. In countries like India, digital identity system failures have led to starvation deaths when people were unable to access food rations.<sup>77</sup>

**Using such imperfect systems to determine whether — based on vaccination status — a person can travel, work, go to school, or carry out other basic functions of daily life is**

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<sup>76</sup> Derechos Digitales. Identification and social protection systems in Venezuela and Bolivia. 2021. (Originally in Spanish) [https://www.derechosdigitales.org/wp-content/uploads/sistemas-de-Identificacion\\_ES.pdf](https://www.derechosdigitales.org/wp-content/uploads/sistemas-de-Identificacion_ES.pdf).

<sup>77</sup> Vivek Bhatnagar, Gaurav. Testimonies Reveal How Aadhaar Has Brought Pain, Exclusion to Poor. March 15, 2018. <https://thewire.in/government/aadhaar-right-to-food-pain-exclusion>.



**likely to have both immediate and long-term impacts that are detrimental to human rights.<sup>78</sup>**

Advocates for such identity systems often argue that their human rights shortcomings can be mitigated by making participation in the system voluntary and by ensuring informed consent for enrollment. However, a person’s agency to give consent is severely compromised if a COVID-19 digital vaccine certificate — either on its own or integrated into a centralized digital identity system — is the easiest way to get a vaccine or to be allowed to fully participate in daily life. These conditions would make participation *de facto* mandatory. Especially in the case of centralized digital identity systems, the pressure to get a vaccine and a digital vaccine certificate would mean a person is not empowered to fully understand and evaluate the harms of such identity systems before getting onboard, and thus the identity system becomes entrenched in their lives.

**Though it is not sufficient on its own, ensuring everyone has meaningful options outside of the digital vaccine certificate or digital identity system is an essential component for the design of any rights-respecting system.**

## Case Studies

<b>India</b>	<p>India’s government promoted the Aarogya Setu contact tracing application as the one-stop solution for everything related to COVID-19. This application provided an interface for a self-assessment of COVID-19 risks, asking users to provide personal information, including habits as well as current symptoms. The app gave an indicator based on the assessment results of “safe” or “unsafe,” which was then used — both formally and informally — to determine whether a person could access services and spaces.</p> <p>The government later used data from Aarogya Setu to seed multiple databases managed by different ministries, though the High Court of Karnataka ordered</p>
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<sup>78</sup> The right to freedom of travel and movement is directly affirmed by the International Covenant on Civil and Political Rights (ICCPR), where Art. 12 requires that any restrictions be both “provided by law,” and “necessary” to protect public health. See <https://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx>.

the central government to refrain from sharing data collected through the app with other agencies.<sup>79</sup>

Now, for the distribution of vaccines, the government of India is using the Co-WIN 2.0 platform, which has already raised many concerns.<sup>80</sup> The vaccine delivery system is being used to populate the database for the Digital Health ID and to coerce people to use Digilocker, a government digital document storage system that is used with Aadhaar, India's digital identity program.<sup>81</sup> This is a coercive step which is being taken without due deliberation or public scrutiny, and with no consideration for privacy rights. This would also violate the fundamental principle of purpose limitation — that data collected for one purpose (for vaccine distribution) cannot be reused for another (for the creation of the Digital Health ID system) without an individual's explicit consent and the option to opt out with no adverse implications for doing so.

People can register online (through the Co-WIN portal) and offline (in person) to receive the COVID-19 vaccine, but they can only get the vaccine certificate either through the Co-WIN platform, via a link sent to their mobile phones, or via their accounts on Digilocker.<sup>82</sup> In April 2021, Aadhaar was listed as a "recommended" mode of identification, for both online and offline registrants.<sup>83</sup> The government has also announced that it will test out an

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<sup>79</sup> The Wire. Who Is my Aarogya Setu Data Shared With? Govt Group Releases Data Protocol. May 11, 2020. <https://thewire.in/tech/aarogya-setu-share-data-access-protocol>; The Hindu. Karnataka HC declines to stay use of Aarogya Setu app, data collected from its users. January 25, 2021. <https://www.thehindu.com/news/national/karnataka/karnataka-hc-declines-to-stay-use-of-aarogya-setu-app-data-collected-from-its-users/article33657421.ece>.

<sup>80</sup> Access Now. Who wins by linking Co-WIN to Aadhaar? February 17, 2021. <https://www.accessnow.org/india-cowin-app/>.

<sup>81</sup> De, Abhishek. Covid-19 vaccination dos and don'ts, how to get your vaccine certificate and more. April 13, 2021. <https://www.indiatoday.in/coronavirus-outbreak/story/covid-19-vaccination-dos-don-ts-certificate-alcohol-side-effects-1788137-2021-04-07>.

<sup>82</sup> Ojha, Sangeeta. COVID-19 vaccination registration: Co-WIN, Aarogya Setu on-site process explained here. April 4, 2021. <https://www.livemint.com/news/india/covid19-vaccination-registration-co-win-aarogya-setu-on-site-process-explained-here-11617498836805.html>.

<sup>83</sup> Ministry of Health and Family Welfare. Guidance note for COWIN 2.0. (undated). <https://www.mohfw.gov.in/pdf/GuidancedocCOWIN2.pdf>.

	<p>Aadhaar-linked facial recognition system in some districts for “contactless” vaccine delivery.<sup>84</sup></p> <p>Making the vaccine or subsequent certification conditional on Aadhaar authentication or linkage would go against all tenets of medical ethics, is a violation of the basic and fundamental right to health, and would also be poor public policy, as the rollout of the vaccine should be focused on universal access to the vaccine. As digital rights, health rights, and public interest groups in India have pointed out, using the vaccination process to test out facial recognition technology poses an alarming threat of exclusion and harms to privacy, with a high likelihood of function creep.<sup>85</sup></p>
<b>Kenya</b>	<p>Kenya’s Ministry of Health plans to unveil a new digital immunization records platform that will be used for COVID-19 vaccination.<sup>86</sup> The Huduma Namba — the national digital identity program in Kenya — was criticized because of the opaque policies of the platform and its inequitable implementation. Critics pointed out that the centralized system was prone to hacking, the possibility of disenfranchising the Nubian minority which has historically experienced discrimination during registration for identity purposes, and more.<sup>87</sup> The new platform raises concerns if it is linked to Huduma Namba as suggested by the chairperson of the COVID-19 taskforce in a statement made in February 2021. For now, authorities are using a pre-existing national identity card or passport as identity documents to record registrants on the platform.<sup>88</sup></p>
<b>Argentina</b>	<p>Argentina implemented the Unified Digital Vaccination Card in 2019, drawing from an existing centralized registry: the Federal Register of Nominalized</p>

<sup>84</sup> Jalan, Trisha. India Piloting Aadhaar-based Facial Recognition for COVID-19 Vaccine, April 8, 2021. <https://www.medianama.com/2021/04/223-aadhaar-covid-vaccine-facial-recognition/>.

<sup>85</sup> April 14, 2021. Digital Rights Bodies Warn Against Use of Facial Recognition Technology in Vaccination Drive. <https://thewire.in/rights/covid-19-vaccination-facial-recognition-technology-aadhaar-vaccine>.

<sup>86</sup> Lidigu, Lealon. Kenya develops Covid-19 digital immunisation system. February 18, 2021. <https://nation.africa/kenya/news/kenya-develops-covid-19-digital-immunisation-system--3296574>.

<sup>87</sup> Cullen, Daniel. High Court of Kenya suspends implementation of biometric ID system. March 16, 2020. <https://ohrh.law.ox.ac.uk/high-court-of-kenya-suspends-implementation-of-biometric-id-system/>.

<sup>88</sup> Id.

Vaccination (NOMIVAC).<sup>89</sup> Vaccine certificates are accessed through the MiArgentina app, which is used to access many public services in the country.<sup>90</sup> For the COVID-19 vaccination process, the vaccine certificate will also be accessed through the MiArgentina app, which will display the name of the vaccine, the number of doses received, and the date and place where the person got vaccinated.<sup>91</sup>

In addition, the government of Buenos Aires announced the creation of a digital ID that will be used to control the vaccination process and later will serve for multiple purposes.<sup>92</sup>

Argentina has a long history of surveillance with little to no oversight or transparency.<sup>93</sup> The national registry database, which is used to authenticate one's identity in the MiArgentina App, feeds a larger public security database called the Federal Biometric Identification System for Security (SIBIOS). This is the largest biometric and centralized database in the country.<sup>94</sup> The database is accessible to provinces, ministries, the judiciary, and police forces without a judicial warrant, and it is used in immigration control. There is a risk that adding vaccine information to the centralized system will further strengthen the surveillance capabilities of the government.

<sup>89</sup> Argentina.gob.ar. Unified digital carnet of vaccination. September 30, 2019. (Originally in Spanish)  
<https://www.argentina.gob.ar/noticias/carnet-unificado-de-vacunacion-digital>.

<sup>90</sup> Argentina.gob.ar. Validate your digital identity. (Originally in Spanish)  
<https://www.argentina.gob.ar/miargentina/validar-identidad>.

<sup>91</sup> Argentina.gob.ar. The national government launched new digital services for the management of the COVID-19 pandemic. March 17, 2021. (Originally in Spanish)  
<https://www.argentina.gob.ar/noticias/el-gobierno-nacional-lanzo-nuevos-servicios-digitales-para-la-gestion-de-la-pandemia-de>.

<sup>92</sup> Infobae. Coronavirus: The Buenos Aires government announced the creation of a "digital card" that it will use for vaccination. December 23, 2020. (Originally in Spanish)  
<https://www.infobae.com/politica/2020/12/23/coronavirus-el-gobierno-bonaerense-anuncio-la-creacion-de-un-carnet-digital-que-usara-en-la-vacunacion/>.

<sup>93</sup> Asociación por los Derechos Civiles. The Identity We Can't Change. December 2017.  
<https://adc.org.ar/wp-content/uploads/2019/11/0027-B-The-identity-we-can-t-change-12-2017.pdf>.

<sup>94</sup> Asociación por los Derechos Civiles. Your digital self. Discovering the narratives on identity and biometrics in Latin America: the cases of Argentina, Brazil, Colombia and Mexico. April 2019.  
<https://adc.org.ar/wp-content/uploads/2020/06/050-tu-yo-digital-04-2019.pdf>.

## V. RECOMMENDATIONS

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For governments evaluating proposals for COVID-19 digital vaccine certificates, private sector actors supporting the global COVID-19 vaccination effort, and international organizations or independent experts formulating public health guidance, we recommend the following:

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### **Do What is Effective, Not What is Trending.**

While existing vaccine certificate systems have their issues, they work. They do not carry the dangers of expansive digital vaccine certificate programs and infrastructure. Prioritize people and their needs, not a technical tool, and optimize for solutions that are less intrusive and that do not hinder rollout of COVID-19 vaccines.

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### **Prioritize Data Protection.**

This means minimizing data collection and retention, meeting and going beyond legal requirements, and following privacy-by-design principles to ensure robust respect for human rights. This broadly applies to both public and private sector actors, including schools and universities, who should only register vaccine status once and should refrain from linking vaccine status to third-party services. Government contracts should be granted through open processes, for limited terms, and strictly limit the purposes, uses, and sharing of personal data.

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### **Be Transparent in both Design and Implementation.**

Bear in mind uncertainties, both about the landscape of vaccines and their long-term efficacy and about the unintended consequences of new digital vaccine certificates. Keep the door open to civil society consultation, maintain the highest standards of care in auditing potential new tools, and communicate clearly with the public to avoid spread of misinformation.

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## **Be Equitable and Inclusive.**

Access to any digital vaccine certificate should be free of charge, accessible, and paired with easily accessible paper-based forms as an interchangeable alternative. All approved vaccines should hold the same value.

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### **Focus.**

Digital vaccine certificates and other COVID-19 response mechanisms must not be treated as a vehicle for accelerating digital transformation more broadly, and especially must not be used to advance adoption of centralized and mandatory digital identity systems that harm human rights. Dedicate resources to meeting the needs of the current moment, and avoid quickly implementing new or expanding existing systems that will have decades-long consequences without proper due diligence and care for human rights.

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## **Prevent Abuse – Now and In the Future.**

Governments should include sunset clauses and strict data retention periods in any public policy approving the use of a digital vaccine certificate, and the collection of COVID-19-related data more broadly. Both government agencies and companies who stand to profit from the implementation of digital vaccine certificate systems must refrain from capitalizing on COVID-19 vaccination efforts to expand surveillance, silence dissent, or restrict freedom of expression, assembly, and movement. Longer term, prevent future harms and exclusion by ensuring universal access to high-quality internet and funding community-led digital literacy programs that leave no one behind.

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## **Don't Create Division.**

Digital vaccine certificates should never be mandatory for exercising fundamental rights and freedoms. Systems that make digital vaccine certificates an actual or de facto requirement will divide and exclude, placing the heaviest burden on those who have already suffered the worst consequences of the COVID-19 pandemic.

## VI. CONCLUSION

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The vaccines have shown a ray of hope to return to the life we had before the pandemic. The COVID-19 vaccination process is an opportunity to focus our efforts on protecting the vulnerable populations who have been most severely impacted.

This situation should not be used as an opportunity to link the vaccination status of an individual with digital identities or to create a separate digital identity framework for recording and authenticating a person's vaccination status. We live in a diverse world where the access to COVID-19 vaccines and the administrative costs are not equal, and where current centralized digital ID systems raise significant concerns for privacy and other human rights. Digital vaccine certificates can lead to exclusion of vulnerable populations, increase security risks through data integration and processing in centralized databases, and ultimately undermine the basic freedoms and autonomy of people who already suffer the most.

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