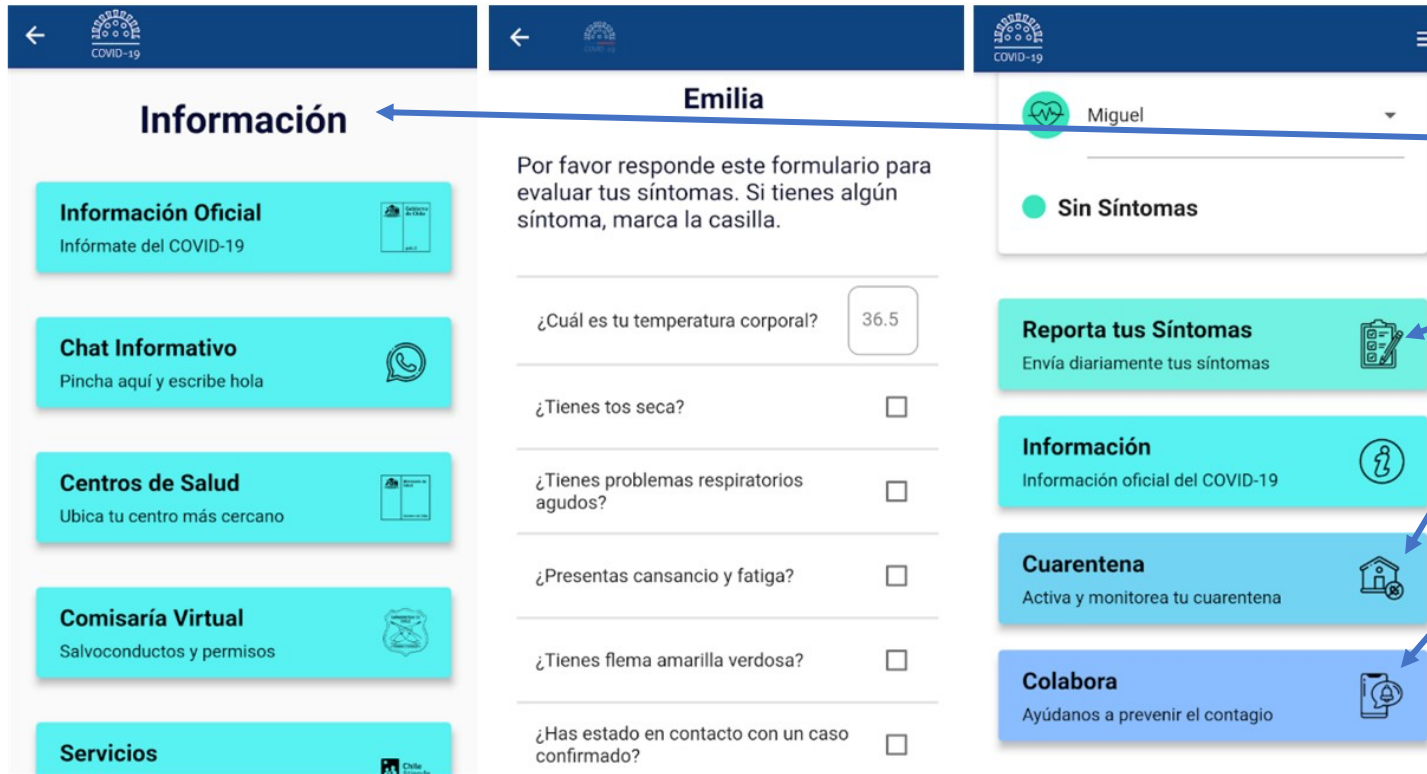# COVID-19 Contact Tracing in Chile: CoronApp

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- App released by the Chilean government on April 16, 2020
- Voluntary and for adult users only (18+)
- Available for iPhone and Android users

Functionality

- Access official government **information** and **contact** health services
- Report **symptoms** up to every hour
- Register residential address to monitor **quarantine** regulations
- **Report** instances where regulations are not being followed (e.g., crowds and/or long lines in indoor spaces)

Video description of the app by Chilean government: https://www.youtube.com/watch?v=f5sUhzlXlOg&t=80s

CoronApp: Data Storage and Management

Data collected	• Required personal data to register user: national ID, full name, age, neighborhood, phone number • Symptom monitoring function requests users to complete checklist of COVID-related symptoms • To access local support (from neighbors), users must enter photo of themselves and their address • To access current location on maps reporting crowded areas, search nearby health centers, or request help, users must allow GPS access, but CoronApp does not store these data • Unspecified data is collected for the purposes of improving the app and user experience
Data storage	Centralized; all information registered on the app is stored and replicated on a private cloud via Amazon Web Services in the US-East Region, physically located in the state of Virginia. This technology "respects confidentiality and privacy of user information in accordance with Chilean law". It is unclear if and how American regulations may also affect data storage and access.
Data access	The Ministry of Health and "other sanitary bodies authorized by law" may access the data. On occasion, the Ministry may transfer data to third parties "based on a judicial or administrative order". It's also stated that the Ministry can, by itself or via third parties, use the anonymized data for historical, statistical, scientific, and research purposes, in order to "improve the management of sanitary services and systems, according to goals compatible with those declared and consented to by the users."
Duration	Users' data will be stored and used "for as long as the sanitary alert remains in place".
User rights	Users can petition to access, rectify, and eliminate the personal data collected by the app, as well as to block certain uses of the data.

Concerns for Digital Self-Determination

Lack of informed consent

- Users can find the Terms of Use online, but are not required to read and accept the terms prior to using the app

- Each user can enter and monitor up to 8 people (supposedly others that live in their household), without needing to obtain their consent

- The extent of data collected and potential uses are unclear

Privacy

- App is linked to the user's government-issued personal identification number and several other pieces of personal data

- Although Ministry claims it will ensure that approved third parties comply with data anonymization and approved uses, this sounds like undefined third parties (public or private entities) are first accessing *deanonymized* data

Undefined and potentially indefinite data use

- The description of potential uses of data, and the third parties that may access it, is very broad and vague

- Unclear for how long data will be kept and used. No clear definition provided for what constitutes the end of the "sanitary alert"

Access and utility

- Elderly and low-income populations without internet or smartphone access cannot use the app and its services

- The app has not been widely adopted, which limits its epidemiological utility

Improvements needed (among others)
- Greater precision in Terms of Use and Privacy Policy
- Commitment to only collect data strictly necessary to respond to COVID pandemic
- Informed consent and sustained efforts to alert the users of all data collected and all potential uses

- "Personal data protection issues with CoronApp application", Michelle Bordachar & Pablo Contreras, April 22, 2020, CIPER Chile https://www.ciperchile.cl/2020/04/22/problemas-de-proteccion-de-los-datos-personales-de-la-aplicacion-coronapp/
- "The legal implications of contact tracing in Chile", Andrés Culagovki, Abdala & Cia. and Diaz Reus https://diazreus.com/wp-content/uploads/2020/06/LATAM_contact-tracing.pdf