COUNTRY	TRACK AND TRACE OPERATION	PUBLIC HEALTH FACTORS	SOCIAL/CULTURAL FACTORS	EFFECTIVENESS
GERMANY	**Quarantine**: Local health authorities instruct individuals when to self-isolate, and when to stop. **Monitoring– *manual***: Confirmed cases receive twice daily phone check-ins (in person if can't be reached). Asked to regularly take temperature and record any symptoms. Planning to significantly increase capacity. **Trace**: "Category 1" contacts (15 min face-to-face; contact with bodily fluids; healthcare staff) required to self-isolate for 14 days, take temperature twice daily and record symptoms. Incoming travellers from all countries are required to give their details to the public health authorities, who are then able to follow up, for example, a plane passenger later tested positive. **App**: Planning a decentralised model. Public Health Agency RKI has a '**Fitness-Tracking App**' – users can donate data from fitness tracking devices to help monitor symptoms. Bavaria is rolling out a software platform that allows patients to independently record their symptoms. The "Bavarian System for Infection Chain Management" (BaySIM) digitises previously analogue processes and enables greater collaboration between different state institutions	**Stage of outbreak:** Germany focused heavily on contact tracing and effective management of infection chains from the beginning of the outbreak. However, once Germany was firmly in the mitigation phase (18 March), the public health authority advised against this intensive approach to contact tracing, as the virus had spread so much within the country. This is still taking place for the (low number) of incoming travellers to Germany and in regions where infections are lower.	**Privacy concerns**: Dropped plans to use a contact tracing app based on centralised data storage mainly due to privacy concerns. Opting for a decentralised model, even though this risks low public support and uptake. **Compliance**: A largely trusting and (in European terms at least) compliant population.	**Judged effective**: Heavy focus on contact tracing and effective management of infection chains since the beginning is widely viewed as having been an important contributor to Germany's relatively low infection rates.
HONG KONG	**Testing**: Rolled out quickly and effectively; one of the highest per capita testing rates in the world. Test all arrivals into the country. **Quarantine**: Confirmed cases are isolated in hospital until they have tested negative twice, even if asymptomatic. "Close contacts" isolated in government facility. All incoming travellers required to self-isolate for 14 days. **Monitoring – *digital***: Mandatory for those in self-isolation to download app and wear wristband linked to it. Sets digital footprint of their home/hotel and sounds an alarm if they leave. Any citizen can access a state of the art government website showing locations of confirmed cases, even the individual building where the infected person lives. Any citizen can access a state of the art government website showing locations of confirmed cases. **Enforcement**: Up to six months in prison and ~£2,500 fine.	**Previous pandemic**: Following 2003 SARS outbreak, invested in technology to enable enhanced contact tracing and have planned and simulated how the system would operate.	**Public acceptance**: Any anger with the government's response has been that it had not gone far enough or been fast enough, rather than bridling against the restrictions imposed. **Personal responsibility**: Public has taken risk seriously from outset. Vigorous standards of public hygiene.	**Judged effective**: The real difference in Hong Kong is the comprehensive test and trace regime and people's sense of personal responsibility. It is the combination of these issues which mean, despite having been affected by COVID-19 since January 2020, Hong Kong has kept its spread under control.

COUNTRY	TRACK AND TRACE OPERATION	PUBLIC HEALTH FACTORS	SOCIAL/CULTURAL FACTORS	EFFECTIVENESS
TAIWAN	**Quarantine:** 100% of confirmed cases are hospitalised. All inbound travellers and contacts of confirmed cases required to self-isolate. **Trace:** Perform contact tracing for every case. **Trace - *manual*:** First stage of contact tracing uses offline means, e.g. interviews. **Trace - *digital*:** Interview findings are combined with personal digital data e.g. telecoms, transport (tour buses, taxis). Emergency legislation means govt analysts can link immigration, national health and household registration data sets, allowing swift and effective identification of potential cases **Monitoring - *manual*:** Individuals required to self-isolate are telephoned once a day (including by the police). **Monitoring - *digital*:** Uses a digital "geofence" for monitoring and enforcing self-isolation; police alerted if phone is taken out of the quarantine location. Same technology used to monitor infringements of social distancing during national holidays when large crowds gathered at tourist locations. Individuals breaking social distancing receive a text asking them to follow the rules and to practice "self-health management" for the next 14 days to reduce the risk of community transmission. **Access to digital data:** Mobile phone operators provide real-time access to the movement of mobile phone users into a central resource. A small team that has been repurposed away from its earthquake, typhoon and flood warning system uses the data to send alerts to individuals and reports to the government. **App:** Now developing a track and trace app in readiness for a large increase in local transmission.	**Previous pandemic:** Experience with SARS in 2003 influenced its preparedness and early action.	**Industrial structure:** Voluntary cooperation of all five of Taiwan's mobile phone operators. They provide real-time access to the movement of mobile phone users into a central resource run by Taiwan's largest (and partially government owned) telecommunications operator. **Public acceptance:** Public tolerance of government collection of data from mobile phones; less of a violation of civil rights than widespread lockdown, which it is being used to avoid. **Technological readiness:** The government has a well-established system of messaging its citizens direct via their mobile phones. For example, all mobiles in Taiwan receive an alert seconds before an earthquake hits. **Compliance:** There is a cultural norm which tends towards compliance; a sense of responsibility towards your society, a tendency to follow rules.	**Judged effective:** Proactive containment efforts and comprehensive contact tracing have kept the number of cases low.

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