

Digital Contact Tracing: Ethics and Governance Guidance

Guiding principles for the use of digital public health technologies for pandemic response

A commitment must be made to a comprehensive pandemic response. This includes investment in traditional public health methods, widespread and freely available testing, support for those who are required to isolate or quarantine, and minimization of the influence of corporate interests. Any use of digital technologies as part of the pandemic response should be guided by the following principles and related actions.



Transparency and public engagement are essential to an inclusive digital public health response

- Government, public health and digital technology leaders must engage effectively with the public and other stakeholders to communicate the utility, importance, oversight and limitations of relevant digital technologies, including their implications for individuals' privacy and civil liberties.
- Transparency at all levels is essential for maintaining public trust and confidence.
- To the extent possible, digital public health responses should reflect the range of values that are important to individuals, including advancing the health and wellbeing of the community as a whole.
- Decision-makers should recognize the sacrifices that some may be willing to make during a pandemic in order to advance public health goals. Acceptance by some of particular monitoring capabilities should not be read as a willingness to extend these methods to other problems or uses.



Digital public health responses must represent the least infringement of civil liberties necessary to accomplish the public health goals

- If preferred digital public health strategies infringe on privacy and other civil liberties, the infringements must be sufficiently justified by the circumstances of the pandemic, offset by ample anticipated public benefit, and considered relative to infringements associated with other possible strategies such as mass physical distancing.
- Only those data that are necessary and relevant for the stated public health purposes should be collected. Identifiable data should be stored in a secure manner and only for the period of time that the public health purposes require.
- Adopted technologies should not be used in ways that subject communities to discrimination or surveillance for non-public health reasons.
- Respect for individual autonomy requires that users are sufficiently informed of the public health goals of the technology and the extent to which those goals are being met.

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Use of digital public health technologies and data must be guided by best available evidence

- Decisions to deploy digital public health technologies should be based on a careful assessment of the uses and limitations of any proposed technology, taking into account the best available evidence.
- Those who deploy digital public health technologies should continuously and systematically monitor their performance, as well as any evidence that is being generated in other contexts about the selected technological solution and about other competing technologies.
- Unintended consequences -- including those which might impact public health goals, core values and interests of the public, and unfair advantage or disadvantage -- should be carefully monitored and addressed as necessary.



Responsible use of digital public health technology requires meaningful governance and accountability

- Systems of governance must be trustworthy and well informed. They must be reviewed and adjusted as circumstances and evidence change or as unintended effects are identified.
- Trusted representatives who are capable of developing and implementing uniform and fair standards for adopting and utilizing underlying digital technology must be identified.
- Understandable, transparent and publicly accessible rules must guide the collection, access, control, use, storage, and combination of data by government authorities, public and private institutions and other parties such as public health researchers.
- Oversight, accountability and consequences for abuse or misuse of these data must be explicit and enforceable.



The deployment of digital be rooted in a commitment to equity

- Digital public health technologies should be deployed in a manner that does not propagate pre-existing patterns of unfair disadvantage or further distribute harms and risks unfairly throughout the population.
- To the extent possible, digital public health technologies should be designed to rectify existing inequities.
- Oversight mechanisms must be in place to ensure that the improved public health outcomes are equitable, and to detect and correct any unforeseen resultant injustices attributable to the technology or that can be addressed using the technology.
- The incentives and disincentives for adopting new technology must be equitable, not exploitative, and aligned with effective use of the technology.
- Disparity-driven technology gaps should be explicitly recognized. To the extent possible, provisions should be made to address the digital divide.

The Project on Ethics and Governance for Digital Contact Tracing is a rapid research and expert consensus group effort led by Prof. Jeffrey Kahn and colleagues in the Berman Institute of Bioethics at Johns Hopkins University and in the Center for Health Security at Johns Hopkins Bloomberg School of Public Health, drawing on experts from both inside and outside Johns Hopkins in bioethics, health security, public health, technology development, engineering, public policy, and law. The group's report and recommendations will be issued in mid-May 2020.