

UTAH LEADS TOGETHER: OPERATIONAL PLAN EXECUTIVE SUMMARY



UTAH is at a tipping point. Modeling and experience from other states suggest that if Utah neglects to implement more aggressive containment strategies as outlined in this plan, ICU hospitalizations will exceed capacity, transmissions will grow exponentially, and an estimated 150,000 to 300,000 Utahns could be out of work by June. These economic and public health impacts will only compound for every week enhanced strategies are delayed.

This operational plan of phase 1 builds on the current strategy to provide a targeted and aggressive approach on all efforts currently underway to overcome the virus through aggressive testing and innovative tools. Utah is striving to flatten the curve while simultaneously reviving the economy, protecting the healthcare system, and reconnecting family and friends.

GOAL:

To protect public health while bringing the economy back online and minimizing the damage to Utah's quality of life.

PROBLEM:

The greatest challenge in containing the virus is to quickly identify unknown, infectious individuals. Current estimates project that for every one diagnosed case, there are approximately four infected people who go undiagnosed. For example, imagine an iceberg. The one individual we know has tested positive represents the tip of the iceberg, which we can readily see. The additional four undetected persons are hidden to the system, like the bottom of the iceberg—the part that wrecks ships. If we don't know who these four people are, where they have been, and who they have come into contact with, the virus will spread exponentially. This problem is compounded by the need to ensure that healthcare workers, first responders, and vulnerable populations have continual access to testing.

STRATEGY:

The strategy is simple. To contain the virus, we must (1) detect those who remain undetected, and (2) quarantine them before they spread the virus.

Utah will stand up large-scale testing and proactive tracing operations that leverage both public and private sector assets to allow for intensity, speed, and precision to strategically contain the virus. These tools include the following:

- **Proactive Tracing Teams:** 'Tracers' will proactively identify individuals who have come into contact with patients testing positive for COVID-19. This effort not only minimizes future transmission but provides individuals proactive care for their health and wellbeing. Current efforts are geared to bring nearly 1,000 additional workers to bolster local health department efforts.
- **COVID-19 Intelligence Portal:** The COVID-19 intelligence portal will collect data from multiple data sources to provide the most relevant measures to guide operational decision making, including our four core measures: transmission, hospital capacity, detection efficiency, and point of exposure.
- **Survey:** A statewide survey will be administered to citizens to help them understand their symptoms. It will also recommend citizens to medical providers for testing. The survey gives decision-makers information to understand where community hotspots may be to deploy strategic mobile testing.
- **Mobile App:** Serving similar and integrated purposes with the survey, a mobile app will be deployed for individuals to gain personal health assessments in addition to geographic information about high-risk areas. Users will also receive notifications and recommended testing if they have come into contact

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with someone who later tests positive. The mobile app will provide public health officials with real-time community-transmission data, placing the power of knowledge into the hands of people

- **Scaled Testing:** To detect the undetected, both testing capacity and testing throughput need to be scaled to accommodate proactive tracing efforts. Currently, 3,000 tests are available daily, but recent public-private partnership efforts will provide 7,000 tests daily.

MEASURES:

Core measures and associated targets will indicate progress toward the clearly defined goal.

1. **Transmission Rate:** The number of COVID-19 cases generated by a single patient. The transmission rate is approximated based on the growth rate of new hospitalizations per day, with a target transmission rate of 1 to 1 or less (one individual infects only one additional person).
2. **Hospital Capacity Utilization:** This measure provides insight into how much available capacity exists in our healthcare systems, and when it is at risk for exceeding capacity threshold. Targeted utilization is not to exceed 85% of ICU bed utilization (leaving 15% capacity).
3. **Detect the Undetected:** Effective tracing methods help reduce transmission rates as positive cases are identified and infected individuals are quarantined immediately. To effectively contain transmission, 80% of currently undetected individuals are targeted to be identified.
4. **Identify Point of Exposure:** Identifying how and where individuals are infected requires determining the initial point of exposure and most common points of origin (including travel, healthcare, community, and known positive cases). As points of exposure are identified, the target seeks to reach 0% community exposure.

ANTICIPATED OUTCOMES

The Governor's efforts to contain the virus through the Utah Leads Together plan has expanded to include more rigorous phase 1 efforts. This intervention of new solutions is key to implement an aggressive containment strategy, which includes: (1) Increasing testing capacity from 3,000 (current) to 7,000 available tests per day, (2) Increasing testing throughput for the purpose of identifying 4,500 - 5,000 infected persons daily, (3) Tracing unidentified cases at a rate of 80% efficiency, and (4) Moderating port of entry interventions through health screenings and recommended quarantines for symptomatic travelers.

Based on an implementation of these strategies, Utah would see a maximum impact of 79% to ICU capacity in five weeks. In other words, 108 of the 513 ICU beds would be left available. It would take up to 17 days for hospitalizations to peak and 21 days until cases consistently decline. Stabilization (or a plateau of new hospitalizations) would be accomplished in 31 days, at which point Utah's total cases and deaths are anticipated to reach 7,500 and 75 respectively.

In contrast, moderate social distancing and less-rigorous intervention would mean ICU hospitalizations would exceed current capacity to 117% in five weeks. Put differently, 600 ICU beds would be needed compared to the current supply of 513 beds. It would take up to 32 days for hospitalizations to peak and 36 days to consistently decline. Stabilization (or a plateau of new hospitalizations) would then be accomplished in 76 days, at which point Utah's total cases and deaths are anticipated to reach 23,000 and 230 respectively.

Though more will be learned through actual experience and implementation of these efforts, it's certain that more aggressive action needs to be taken immediately to effectively overcome COVID-19.