Psychological Effects of Quarantine During Infectious Disease Outbreaks: What Public Health Leaders Need to Know

Quarantine is defined as the separation of individuals who may have been exposed to an infectious disease from the rest of the population to determine if they are ill and to reduce their risk of infecting others. During infectious disease outbreaks, quarantine may be used as a public health strategy to reduce disease transmission. While quarantine can broadly serve the public good, it is also associated with psychological challenges for those quarantined, their loved ones, and the healthcare workers caring for them. Much of the weight of professional, administrative, political, and programmatic factors of quarantine rests upon public health leaders. This fact sheet describes some of the factors especially relevant to senior public health officials, such as local, state, and tribal health authorities, as they consider their roles in the range of psychological effects related to quarantine.

Stressors of Quarantine and their Psychological Effects
Quarantine can expose individuals to stressors both during and after the quarantine period and may result in adverse acute and long-term psychological outcomes. Effects of quarantine can include symptoms of posttraumatic stress, anxiety, and depression, and responses such as fear, anger/irritability, insomnia, fatigue, detachment and avoidance behaviors, impaired concentration, and diminished work performance. More information on the nature of stressors during and after quarantine, as well as guidance on how to provide care that promotes mental wellbeing, can be found in the resources section of this document.

Tasks for Public Health Leaders (Specific to Psychological Effects and Factors)
1. Gather and utilize knowledge and expertise — Behavioral health factors in disasters and other extreme events is a very specialized area within the behavioral sciences. Public health leaders are encouraged to seek such expertise within their own systems as well as from leaders in academia and other governmental entities. Once identified, strategies are needed to ensure the integration of their expertise into decision-making processes used by public health leaders.

2. Monitor psychological effects — Psychological impact varies greatly depending on the nature of the event, event stage, geography, and other factors. In addition, these effects frequently change over time as a function of threat status and the impact of intervention efforts. Effective monitoring of impact and adaptation of strategies will help ensure that efforts are focused where most needed. These effects are experienced by diverse individuals such as those quarantined, their families, health and behavioral health care providers, and others.

3. Assist in resource identification, provision, operations, adaptability, and integration — Leaders are frequently the seekers and gatekeepers of resource acquisition and deployment. They also play a central role in ensuring that resources are appropriately targeted and integrated with other related efforts. Integration of efforts and resources across professional cultures and organizational structures is critical to optimal programs, especially in potentially complex and controversial strategies, such as quarantine. At a minimum, in quarantine situations, important systems include behavioral health, public health, medical services, social services, education systems, medical examiners, and faith communities.

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4. **Integrate public health efforts with behavioral health services and systems** — While integration of all systems is important, integration of public health and behavioral health systems is especially important. In many jurisdictions, they exist in the same governmental systems. Integration begins in the preparedness phase of events and should continue in the response and recovery phases. Encourage behavioral health integration in the considerations to initiate quarantine. Continue this integration through operation, close-down, and follow-up periods.

**Tasks of Public Health Leaders (More Broadly)**

1. **Lead** — Public health leaders have the opportunity, and even responsibility, to lead within public health communities and structures, across organizational lines, and up and down the organizational chart. Effective leadership in all of these domains will enhance the probability of programmatic success.

2. **Consider workforce factors** — Quarantine of exposed healthcare workers will impact both those exposed, but also the systems in which they work as increased demand for services intersects with decreased capacity due to loss of quarantined workers. The workforce providing services in the case of quarantine (as well as other adverse public health events) are at both general and behavioral health risk. Remain attentive to the needs of all workers. Take positive steps to combat stigma toward exposed and potentially exposed workers. Also pay attention to fatigue and overwork in the remaining workforce. A central role of public health leaders is to motivate, protect, and promote the workforce. Part of that role is to acknowledge, validate, and respond to the psychological needs of the workforce and their families.

3. **Seek behavioral health subject matter expertise** — Public health leaders typically do not personally possess content in expertise in the wide and diverse areas required to do their jobs. It is incumbent on public health leaders, as noted earlier, to have easy access to those with content expertise in this specialized area of behavioral health.

4. **Engage political leadership** — Disasters of all types draw the attention of political leaders. Public health leaders should be prepared to explain needs and strategies to political leaders in ways that are understandable and support the mission. They should be prepared to anticipate questions and concerns and have credible responses ready. Political factors change over time, so leaders should be prepared to adapt to these changes.

5. **Communication (general)** — Communication is part of every function for all leaders, including public health leaders. This is true at all times, even when a crisis is not at hand. Skills in how to communicate effectively and strategies to establish and maintain effective communications are critical.

6. **Communication (risk and crisis)** — In a crisis or when communicating health risk, special skills and training are helpful. Public health leaders are encouraged to work with communications professionals and take advantage of established guidance (e.g., the CDC's Crisis and Emergency Risk Communication Manual). Effective communication, especially in novel and complex situations such as quarantines, are behavioral health interventions. They can reduce community distress as well as enhance adherence with behavioral health and other health recommendations.

**Resources**
