



Defining information needs, gaps, and blind spots:

Information requirements to inform situational awareness and decision making for community settings

Lisa C. Barrios, DrPH, ScM
Centers for Disease Control and Prevention
Office of Readiness and Response

July 16, 2026

Levels of Decision Making

- National
- State and local
- Community setting
- Families and individuals

Decision Maker Roles

- Set goals and select intervention strategies based on goals and data.
- Communities may set different prevention and mitigation goals based on local data as well as feasibility and acceptability of intervention strategies.
- Communicate frequently.
- Explain how and why decisions are made and how data will be used to select intervention strategies.

Information Needs



Epidemiology

- What is the severity of the illness?
- What is the morbidity and mortality?
- Who is most affected?
 - Consider age groups, regions, and vulnerable populations.
 - Are different groups affected differently in terms of hospitalizations and deaths?
 - How are populations at increased risk for serious complications distributed within the jurisdiction?

Healthcare

- Can health-care providers and hospitals accommodate increased visits?
- Are there enough resources such as staffed hospital beds, medications, and ventilators?
 - Are there resources for pediatric patients as well as adults?
- Can emergency departments and ICUs accommodate increased demand?
- Is absenteeism increasing among health-care workers due to illness in themselves or their family members?

Feasibility

- Do strategies need to be implemented in a particular order?
- Are changes to legal authority or policy needed?
- How long will specific strategies take to get started? How long can they be sustained?
- What resources are needed and available to implement the strategies?
- What obstacles could decrease the effectiveness of the strategies?
- What can be done to improve adherence to recommendations?

Acceptability

- What are public concerns?
- Do social norms and public opinion support or reject specific strategies under consideration?
- What communication efforts can be used to explain the need for the strategies to the public? To address rumors and misinformation?
- How should guidance be adapted for use with multiple audiences?
- How can expected benefits be measured and shared with the public?
- What negative effects could occur? How could they be reduced?
- What can be done to increase the public's self-efficacy for implementing protective actions?

Community Settings

- Schools, early childhood education/childcare, and institutions of higher education
- Carceral facilities
- Homeless shelters and encampments

Data Gaps and Decisions can Impact Underrepresented Groups Differently: Schools and COVID-19



Lessons Learned

- Communicate **early and often** what is known and unknown about the cause of the emergency or infectious agent, data gaps, and that recommendations will change.
- **Share data as soon as possible**, even when provisional, noting that it might change. Sharing data early builds trust and promotes early action.
- Base recommendations for actions on **knowledge available at the time**.
- **Layer prevention strategies** to provide as much protection as possible and meet the needs of populations at higher risk.
- **Rapidly conduct and publish investigations** to add to the knowledge base and guide recommendations.

References

- Barrios LC, Koonin LM, Kohl KS, Cetron M. Selecting nonpharmaceutical strategies to minimize influenza spread: The 2009 Influenza A (H1N1) Pandemic and Beyond. *Public Health Reports* 2012; 127(6):565-571.
- CDC. Preventing Spread of Infections in K-12 Schools. Accessed July 16, 2026. [Preventing Spread of Infections in K-12 Schools | CDC](#).
- Hertz MF, Kilmer G, Verlenden J, Liddon N, Rasberry CN, **Barrios LC**, Ethier KE. Adolescent mental health, connectedness, and mode of school instruction during COVID-19. *J Adolesc Health* 2022;70(1):57-63. DOI: <https://doi.org/10.1016/j.jadohealth.2021.10.021>.
- Neatherlin J, Thomas ES, Barrios LC. Test-to-Stay programs in schools are effective but are they equitable? *Pediatrics* 2022; 149(5):e2021055930. Doi: <https://doi.org/10.1542/peds.2021-055930>.
- Verlenden JV, Pampati S, Rasberry CN, Liddon N, Hertz M, Kilmer G, Viox MH, Lee S, Cramer NK, Barrios LC, Ethier KA. Association of children's mode of school instruction with child and parent experiences and well-being during the COVID-19 pandemic – COVID Experiences Survey, United States, October 8—November 13, 2020. *MMWR Morb Mortal Wkly Rep*. 2021;70(11):369-376.