

Prioritizing Cases and Contacts: Considerations for STI Programs During Emergency Response

Overview

Disease intervention specialists (DIS) are critical to controlling sexually transmitted infections (STIs), HIV, tuberculosis, mpox, and other emerging and re-emerging infectious diseases. Their role includes case investigation, contact tracing, patient education, and linking individuals to resources to support prevention and treatment. Beyond routine STI prevention, DIS are integral to responding to outbreaks and emerging infectious disease threats, ensuring rapid containment and mitigation of emerging health threats.

Given the growing burden of infectious diseases and constrained public health resources, jurisdictions may face decisions around optimizing DIS efforts. Prioritization is critical in emergencies where rapid response can prevent widespread transmission and minimize health consequences. This brief aims to support health agency leadership navigate complex decisions about resource allocation, balancing immediate outbreak response with ongoing disease surveillance and prevention efforts.

Key Considerations

Routine and emerging infectious disease threats have varied transmission mechanisms, disease severity, and other factors that make them unpredictable. When thinking about assigning resources like DIS in preparation for an outbreak, health agencies may consider:

- **Risk of Transmission and Public Health Impact:** Prioritize cases with *high transmission potential*, such as individuals with multiple sexual partners, those in high-contact professions, or areas with dense populations. Rapid response is crucial for *airborne or direct-contact infections* to prevent outbreaks and ensure preparedness for future scenarios.
- **Severity of Disease and Health Consequences:** Focus on *high-risk cases* like syphilis in pregnancy, multidrug-resistant gonorrhea, tuberculosis, and untreated HIV. Emerging diseases with *high morbidity and mortality* should be contained quickly to minimize health consequences, while also supporting health care system capacity for a rapid response.
- **Available Medical Interventions:** The availability of effective treatments, vaccines, or preventive measures can influence the allocation of resources to manage cases or conduct outreach efforts. Diseases with proven treatments or vaccines may warrant different resource strategies compared to those with limited or no interventions.
- **Epidemiological Data and Trends:** Ongoing surveillance data — including trends in case growth, geographic spread, and populations at highest risk for infection — should be considered when allocating resources. This includes emerging or routine infectious diseases, prioritizing those with the greatest potential to impact public health.

Policy Recommendations for Prioritizing Cases and Contacts

Jurisdictions should consider developing prioritization plans and policies in advance of an infectious disease outbreak. In any given outbreak, jurisdictions may prioritize population with increased transmission (or risk) of more than one infectious disease, particularly over a short period of time. While it is impossible to predict the exact scenario that may be faced, cases that should be prioritized during an infectious disease outbreak generally include:

HIV

- *Newly diagnosed individuals with detectable viral loads* are at high risk for transmitting HIV. Early diagnosis and linkage to treatment reduce viral load and transmission risk. DIS ensure these individuals are rapidly linked to care.
- *Individuals with gaps in care*, such as those not regularly engaged in care, have increased transmission risk. DIS help reduce these gaps by facilitating timely access to treatment partner notification and HIV pre-exposure prophylaxis (PrEP) services.

Viral Hepatitis

- *Acute hepatitis B and C cases*, especially among priority populations (e.g., people who inject drugs, pregnant individuals). This includes *newborns*, ensuring linkage to care for parent and infant vaccination, testing, and treatment as recommended.

Syphilis

- *Pregnant cases and cases in earlier syphilis stages* to break transmission cycles. Enhance partner services and timely treatment interventions.

Gonorrhea and Chlamydia

- *Cases with antimicrobial-resistant gonorrhea* and people who are at high-risk of transmission (e.g., gay, bisexual, and other men who have sex with men, women of childbearing age). Screening, partner notification, and treatment adherence help reduce disease transmission.

Mpox and Emerging Infectious Diseases

- *Clusters, high-risk exposures, and novel outbreaks with high morbidity*. Responses are most effective when coordinated with vaccination, testing, and targeted education.
- *People who are immunocompromised, or with uncontrolled HIV infection*, are [at higher risk](#) for severe mpox outcomes.

Conclusion

By considering transmission risk, disease severity, and available resources, jurisdictions can optimize their response strategies, including strategies to prioritize DIS allocation. These considerations and recommendations cannot be made in a vacuum. Health agencies should also consider other jurisdictional context, including resources and needs related training, data-driven decision-making, and cross-sector collaboration, to ensure they are equipped to respond to both routine and emergent infectious disease threats. There is no effective and reliable one-size-fits approach to prioritizing populations and resources during infectious disease outbreak response. Strengthening DIS capacity enhances disease prevention and control, ultimately reducing transmission rates, improving health outcomes, and addressing disparities in access to care.

Want more infectious disease preparedness stories and best practices?

Visit ASTHO's INSPIRE: [Readiness resources.](#)

