

Disease Intervention Specialists: Essential Workforce in Public Health



DIS are essential and health departments and other relevant agencies should ensure they are fully supported

What is a Disease Intervention Specialist?

Disease Intervention Specialists (DIS) are highly trained public health professionals at the forefront of detection, treatment, and prevention of disease. DIS are the front lines of addressing emerging outbreaks such as Zika and Ebola, and more recently, the COVID-19 response.^{1,2,3} They are instrumental in addressing surges in infectious diseases, particularly in sexual health. In 2023, more than 2.4 million STIs were reported in the U.S. DIS are an essential part of the health department's prevention and care team and are invaluable to STI, HIV, and other programs as they work to address these rising numbers.

DIS are intimately aware of individuals' ability to access care and support services. The current number of infections represents an overwhelming burden of patients for DIS to locate, test, treat, and connect with other services.^{4,5} With such a broad range of skills, DIS may be increasingly asked to assist with providing linkage to care for people with hepatitis C, responding to the opioid epidemic, or seeking out and counseling at-risk individuals about PrEP. Funding flexibility is needed so DIS can nimbly respond to interconnected infections and conditions.

DIS should be optimized to promote and implement approaches that advance STI prevention as part of the broader syndemic of STIs, HIV, viral hepatitis, substance use, and mental health - as these conditions can exacerbate one another - including integrating services (e.g., offering STI services in harm reduction settings). The expertise of DIS is vital, yet they struggle to manage their workload in the face of surging rates of STIs and at the same time, the hiring of new DIS and the increases in pay are not keeping pace.

Recommendations

Supporting DIS with the tools and resources they need to address social, cultural, and structural factors influencing health is instrumental to addressing infectious disease, reversing rapidly increasing rates of STIs, and preventing new cases of HIV. There are various ways to support the DIS workforce:

Pay



Pay equity should be pursued by adjusting salary based on other jobs in the community with similar needed skills and incentivizing specialized roles or additional responsibilities. DIS are often expected to perform additional roles such as informing the development of clinic workflows and outreach programs, which should be properly compensated. Bonuses should also be considered to improve DIS retention during challenging and stressful periods to counteract high staff turnover.

Training



Health departments should implement policies and programs that equip DIS with training and resources to address STIs within the broader syndemic of HIV/STIs, viral hepatitis, and substance use disorder by addressing related social determinants of health and co-occurring conditions, such as poverty and homelessness.

As available, DIS certification programs should be promoted to:

- 1. Establish core competencies**
- 2. Strengthen and formalize the role**
- 3. Expand the recognition of the profession among healthcare professionals and the community**
- 4. Ensure adequate and standard training to improve service provision and health outcomes**



To keep DIS' skills sharp, easily accessible training should be provided in motivational interviewing, trauma-informed care approaches, partner services, cultural humility, sexual orientation and gender identity, field-safety and other relevant topics. A study of DIS supervisors highlighted how training in a wide range of skills and access to technologies such as social media websites and apps to assist with partner services are essential for DIS to be successful.² DIS must be given the proper funding and time for professional development opportunities. These could include cross-training in phlebotomy, surveillance, and other areas that can diversify their skillset, attending conferences for peer exchange, and forming professional networks.

Technology and Innovation



Access to electronic health records (EHRs) needs to be expanded at local health departments, hospitals, and health systems and support integration of cases/records in surveillance systems for DIS and similar roles to avoid duplication of efforts and ensure continuity of care. Technology is a vital part of DIS work and health departments should facilitate their access to social media and dating applications (e.g., text/electronic partner notification) in line with established best practices.⁶

Caseload



Burnout and compassion fatigue can be avoided by determining manageable caseload ratios for DIS that prioritize congenital syphilis and refining approaches to partner services based on epidemiological and STI/HIV surveillance data.⁷ Self-care and work-life balance need to be promoted by leadership by expanding opportunities to telework and encouraging DIS to make use of employee assistance programs, paid sick time for mental health days, and stress management tools.

Representation



DIS should reflect the communities they serve and therefore, talent pipelines should be established from the community and local universities/colleges to the public health workforce, prioritizing candidates who have lived experience. By bringing staff from the community, trust and rapport are developed to enable more effective communication and timely interventions for STI/HIV prevention and management.

Outreach and Community Engagement



Health departments should leverage collaboration and strengthen partnerships with hospitals and health systems, jails, pharmacies, private providers, and community partners (e.g., HIV prevention, syringe service programs, faith-based organizations, etc.) to optimize DIS relationships in the communities. STIs being tackled with a syndemic focus will involve screening and treatment in nontraditional settings such as harm reduction sites, so it is important that DIS become familiar with these new partnerships. Outreach should be conducted to private providers, hospitals, and other healthcare facilities in the communities via public health alerts and health systems calls to explain the role of the DIS and how open communication with them supports the health of the community.

Sources

1. CDC. (2024, April 24). Disease Intervention. Sexually Transmitted Infections (STIs). <https://www.cdc.gov/sti/php/projects/disease-intervention.html>
2. Cope AB, Mobley VL, Samoff E, O'Connor K, Peterman TA. The Changing Role of Disease Intervention Specialists in Modern Public Health Programs. *Public Health Rep.* 2019 Jan/Feb;134(1):11-16. doi: 10.1177/0033354918813549. Epub 2018 Nov 30. PMID: 30500306; PMCID: PMC6304721.
3. National Association of County and City Health Officials. (2009). Statement of Policy - Sexually Transmitted Infections. https://www.naccho.org/uploads/downloadable-resources/09-10-Sexually-Transmitted-Infections_2023-03-30-195456_pdzd.pdf
4. Sexually Transmitted Infections Surveillance, 2023. (2024, November 12). STI Statistics. <https://www.cdc.gov/sti-statistics/annual/index.html>
5. Cope, Anna Barry PhD*,†; Mobley, Victoria L. MD†; Samoff, Erika PhD†. Measuring Success: Disease Intervention Specialists Performance Metrics and Outcome Assessments. *Sexually Transmitted Diseases* 50(8S):p S18-S22, August 2023. | DOI: 10.1097/OLQ.0000000000001740
6. The Toolkit for Technology-based Partner Services for Public Health | The Toolkit for Technology-based Partner Services | CDC. Centers for Disease Control and Prevention | CDC. (n.d.). Retrieved from <https://www.cdc.gov/std-ips/php/index.html>.
7. National Association of County and City Health Officials. (2024). Statement of Policy - Congenital Syphilis. https://www.naccho.org/uploads/header-images/naccho-general/24-03-Congenital-Syphilis-Policy-Statement_New.pdf