The Centers for Disease Control and Prevention (CDC) began working in South Africa in 1989 and established an office in 1995. CDC partnered with South Africa to develop HIV clinical and research guidelines, and HIV and tuberculosis (TB) service delivery programs. CDC works with the South African National Department of Health (NDOH) to support COVID-19, HIV, TB, and influenza programs, and to strengthen laboratory, disease surveillance, and workforce capabilities.

- In 2018, CDC supported the implementation and expansion of the Synchronized Communication in Health (SyNCH), a web-based system that ensures data accessibility and reporting across models of care.
- More than 130 participants have graduated from South Africa’s Field Epidemiology Training Program (FETP) since 2006.
- CDC supported establishment of COVID-19 surveillance systems in all nine provinces by adapting existing influenza and respiratory disease surveillance platforms.
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- CDC supported establishment of COVID-19 surveillance systems in all nine provinces by adapting existing influenza and respiratory disease surveillance platforms.
- CDC helped strengthen COVID-19 genomic sequencing capabilities at the National Institute for Communicable Diseases (NICD) to identify emerging variants in South Africa and the surrounding region.
- In 2021, CDC supported antiretroviral therapy (ART) services for over 1.9 million people living with HIV.
- CDC’s implementing partners achieved 99% coverage of HIV testing among pregnant women and 99% treatment initiation for pregnant women living with HIV in 2021.
- Mother-to-child transmission of HIV decreased from 3.5% in 2010 to less than 1% at birth in 2021.
- In 2021, 94% of TB patients were tested for HIV and 94% of TB patients living with HIV received ART with TB treatment.
- In 2021, CDC helped launch Patient Support System, a digital app that allows healthcare providers to send patients appointment reminders and educational health messages about viral load testing.
- CDC used the Extension for Community Healthcare Outcomes (ECHO) platform to train 2,000 pathologists in virology, chemistry, microbiology, and genetics in 2021.
- CDC has collaborated with the Human Sciences Research Council (HSRC) to conduct national HIV household surveys since 2005.
- CDC supported enhanced surveillance for lower respiratory tract infections and influenza-like illnesses by expanding existing platforms to include respiratory syncytial virus (RSV), pertussis, and COVID-19.

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Field Epidemiology Training Program (FETP)

CDC helped launch the South Africa FETP in 2006 in collaboration with the NDOH, National Institute for Communicable Diseases (NICD), the University of Pretoria, and Wits University. FETP trains epidemiologists to prevent, detect, and respond to outbreaks before they become epidemics. Participants develop skills for gathering data and translating data into evidence-based action. CDC continues to support and expand South Africa’s FETP courses, including Frontline (Basic), Intermediate, and Advanced levels. CDC staff assist all three levels of training by teaching, mentoring, and supervising participants. All three FETP levels have participated in the COVID-19 response in South Africa.

COVID-19

The first case of COVID-19 in South Africa was confirmed on March 5, 2020. Since the pandemic was declared, CDC implemented a broad and proactive public health response to prepare, detect, and respond to COVID-19. CDC engaged in technical collaboration with the NDOH and NICD on disease surveillance, laboratory strengthening, and health communication. As cases increased, CDC expanded its scope of work to include:

- Supporting surveillance and epidemiology
- Strengthening laboratory capacity, including genomic analysis
- Researching COVID-19 burden, transmission, seroprevalence, and morbidity
- Strengthening border health, risk communication, and vaccine preparedness and delivery
- Strengthening epidemiologic capacity through FETP courses

All COVID-19 programs leverage existing CDC and South African structures and partnerships, including those from the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) and influenza surveillance.

Health Systems Strengthening

CDC supports the NDOH to assess, enhance, and use existing information systems across the South African Government. This support helps the government plan human resources for health (HRH) based on community needs, burden of disease, and characteristics of individual health facilities. Access and analysis of HRH data is critical to strengthening South Africa’s public health workforce and HIV epidemic response and ensuring equitable resource allocation. These data also indicate key focus areas for HRH efforts in the public sector to achieve public health goals, inform training plans for health workforce management, and enhance monitoring of health workforce performance in achieving HIV epidemic control. The NDOH also uses HRH data to inform public health data reporting and program planning.

HIV and Tuberculosis (TB)

South Africa has the highest number of people living with HIV in the world, accounting for nearly one in five people living with HIV globally. Through PEPFAR, CDC works with partners toward HIV epidemic control in South Africa. CDC and South Africa strategically support HIV prevention and treatment programs and system strengthening. Through PEPFAR, CDC leads efforts to increase voluntary medical male circumcision among men aged 15 years and older. CDC supports pre-exposure prophylaxis for key populations and provides comprehensive services for sex workers, men who have sex with men, transgender people, people who inject drugs, and people in prisons.

CDC also supports HIV programs designed for adolescent girls and young women aged 15-24 years. Compared to male peers, adolescent girls and young women are two and a half times more likely to be infected with HIV. Women and girls account for three out of every four new HIV infections in the 15-24 age group. To address complex factors that increase risk of HIV infection among adolescent and young women, CDC implements the Determined Resilient Empowered AIDS-free Mentored Safe (DREAMS) program. DREAMS includes multiple evidence-based activities such as post-violence care, parenting/caregiver programs, and facilitating access to existing resources such as cash transfers and education subsidies.

CDC also supports integration of HIV and TB clinical programs since TB is the leading cause of death among people living with HIV. CDC engages in technical collaboration with the National TB Control Program to address multi-drug resistant TB and TB/HIV co-infection.

Antiretroviral treatment (ART) is packed and ready for delivery to clients at home during the COVID-19 pandemic. Photo by Aurum Institute.
Laboratory Capacity Building

CDC supports national programs that strengthen HIV and TB laboratory diagnostic quality and public health laboratory service. These programs ensure facilities have access to laboratory information systems for timely result delivery and documentation of results in the patient management system. CDC also helps strengthen the connection between clinics and laboratories by ensuring human resources are available to train, mentor, and supervise continuous quality improvement initiatives at healthcare facilities and laboratories.

- Through the Rapid Test Continuous Quality Improvement (RTCQI) program, CDC helped increase the quality of HIV rapid testing in more than 2,800 healthcare facilities.

Disease Surveillance

CDC supports local implementing partners to conduct research that informs South Africa’s HIV response and programs. This research includes population surveys to understand HIV prevalence and incidence, HIV case surveillance, HIV drug resistance surveillance, and HIV mortality surveillance. For key population groups, CDC also supports size estimations and bio-behavioral surveys that inform HIV epidemic surveillance, programs, and epidemiological models used by the South African Government, PEPFAR, and a network of nongovernmental organizations, advocacy groups, and community groups.

- CDC published estimates of health and economic burden of severe pneumonia caused by influenza and other respiratory pathogens in South Africa (2020).

Influenza

Influenza viruses require continued vigilance to mitigate seasonal influenza and novel strains. CDC South Africa’s Influenza Program is a regional hub that provides technical support to surrounding countries to prevent, control, and respond to influenza. Since 2007, CDC has worked with partners to enhance the quality of influenza surveillance and broaden the scope to include other respiratory pathogens, such as RSV and SARS-CoV-2. CDC researches influenza and other respiratory viruses in South Africa to understand where disease burden and epidemiology is unique due to untreated comorbidities such as tuberculosis, malaria, and HIV. CDC also engages in other research efforts, including assessment of household transmission of influenza and SARS-CoV-2, a healthcare utilization survey for respiratory illness, and a feasibility assessment of a pediatric influenza vaccine efficacy study.

- CDC published estimates of health and economic burden of severe pneumonia caused by influenza and other respiratory pathogens in South Africa (2020).