

AFD Ep 441 Links and Notes - History of the CDC [Rachel] - Recording Sept 25, 2022

- **Intro:** As listeners may have heard last week, I recently went to a training at the CDC Atlanta Campus. But why is the main CDC Campus in Atlanta, Georgia? This week, we're delving into the origin of the CDC, its historical ties to military fitness, and how it became the massive public health agency it is today.
- <https://www.cdc.gov/about/history/index.html>
- <https://www.cdc.gov/mmwr/preview/mmwrhtml/00042732.htm> (expanded history)
- <https://daily.jstor.org/the-origins-of-the-cdc/>
- https://en.wikipedia.org/wiki/Centers_for_Disease_Control_and_Prevention#Establishment
- https://en.wikipedia.org/wiki/National_Malaria_Eradication_Program
 - CDC didn't start out as the CDC, its origin stretches back to a program started by the Public Health Service (PHS) called Malaria Control in War Areas, which was launched in 1942. Many of the US's military camps were located in the South, where malaria was a significant risk to military fitness. The program operated in 15 southeastern states and the Caribbean, and focussed on destroying mosquito larvae before they could develop into adult, disease-spreading mosquitoes. They sprayed diesel fuel, and later DDT, on areas where mosquitoes bred.
 - The Communicable Disease Center was founded July 1, 1946. It occupied a single floor of the Volunteer Building on Peachtree Street in Atlanta, Georgia. Atlanta was chosen as the site for the CDC because malaria was endemic to the area. There were fewer than 400 employees, and they were mainly engineers and entomologists, in keeping with their focus on zoological diseases. Justin Andrews, a scientist at the PHS, wrote in August of 1946 that the CDC's focus was on malaria, hookworm, yellow fever, and "diverse diarrheas and dysenteries."
 - Many state and local health departments - and even foreign public health agencies - started sending their staff to CDC for training. In 1949, CDC added an epidemiology department, with Dr. Alexander Langmuir as the new department's head. Dr. Langmuir started the first-ever disease surveillance program, which tracked disease data. He discovered that malaria, the disease that most of the CDC's budget went toward combatting, wasn't the problem it once was. Disease surveillance and data tracking became the main focus of CDC which shaped the trajectory of public health in the years to come.
 - At the start of the Korean War in the 50s, CDC created the Epidemiology Intelligence Service (EIS) to counter the growing threat of biological warfare (although I would argue we were the ones that were threatening the world at that time). Their job was to ferret out emerging infectious diseases around the world. The first class of EIS officers were trained in Atlanta in 1951 and were then sent across the globe for 2-year stints. The EIS program continues to this day, dispatching EIS fellows to assist with disease investigations both at home and abroad.
 - Although CDC was outgrowing their headquarters and expanding their services, PHS was less interested in CDC than in expanding the NIH and their research efforts. Although Emory University gifted CDC land on Clifton Road in 1947, it took more than a decade and pleading their case to Congress to finally get funding for construction of a new campus.
 - Two events in the 50s highlighted the importance of the CDC. A contaminated batch of Salk polio vaccine was causing poliomyelitis in vaccinated children, and the CDC was able to trace the bad batch to a laboratory in California. The other event was an outbreak of influenza in 1957. Surveillance data tracked the spread

and the scope of the outbreak. From these data, the national guidelines for influenza vaccine were developed.

- *CDC grew by acquisition. The venereal disease program came to Atlanta in 1957 and with it the first Public Health Advisors, nonscience college graduates destined to play an important role in making CDC's disease-control programs work. The tuberculosis program moved in 1960, immunization practices and the MMWR in 1961. The Foreign Quarantine Service, one of the oldest and most prestigious units of PHS, came in 1967; many of its positions were soon switched to other uses as better ways of doing the work of quarantine, primarily through overseas surveillance, were developed. The long-established nutrition program also moved to CDC, as well as the National Institute for Occupational Safety and Health, and work of already established units increased. Immunization tackled measles and rubella control; epidemiology added family planning and surveillance of chronic diseases. When CDC joined the international malaria-eradication program and accepted responsibility for protecting the earth from moon germs and vice versa, CDC's mission stretched overseas and into space.*
- *CDC played a key role in one of the greatest triumphs of public health: the eradication of smallpox. In 1962 it established a smallpox surveillance unit, and a year later tested a newly developed jet gun and vaccine in the Pacific island nation of Tonga. After refining vaccination techniques in Brazil, CDC began work in Central and West Africa in 1966. When millions of people there had been vaccinated, CDC used surveillance to speed the work along. The World Health Organization used this "eradication escalation" technique elsewhere with such success that global eradication of smallpox was achieved by 1977. The United States spent only \$32 million on the project, about the cost of keeping smallpox at bay for 2-1/2 months.*
- *CDC also achieved notable success at home tracking new and mysterious disease outbreaks. In the mid-1970s and early 1980s, it found the cause of Legionnaires disease and toxic-shock syndrome. A fatal disease, subsequently named acquired immunodeficiency syndrome (AIDS), was first mentioned in the June 5, 1981, issue of MMWR. Since then, MMWR has published numerous follow-up articles about AIDS, and one of the largest portions of CDC's budget and staff is assigned to address this disease.*
- *Although CDC succeeded more often than it failed, it did not escape criticism. For example, television and press reports about the Tuskegee study on long-term effects of untreated syphilis in black men created a storm of protest in 1972. This study had been initiated by PHS and other organizations in 1932 and was transferred to CDC in 1957. Although the effectiveness of penicillin as a therapy for syphilis had been established during the late 1940s, participants in this study remained untreated until the study was brought to public attention. CDC also was criticized because of the 1976 effort to vaccinate the U.S. population against swine flu, the infamous killer of 1918-19. When some vaccinees developed Guillain-Barre syndrome, the campaign was stopped immediately; the epidemic never occurred.*
- *As the scope of CDC's activities expanded far beyond communicable diseases, its name had to be changed. In 1970 it became the Center for Disease Control, and in 1981, after extensive reorganization, Center became Centers. The words "and Prevention" were added in 1992, but, by law, the well-known three-letter acronym was retained. In health emergencies CDC means an answer to SOS*

calls from anywhere in the world, such as the recent one from Zaire where Ebola fever raged.

- Somewhat ominous final line from the Editorial Note at the end of the MMWR article: As the world enters the new millennium, CDC will remain the agency ready to address the challenges to its vision of healthy people in a healthy world through prevention.

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