

Changing Desires and Aims in Public Health Mapping in the United States, 1920-2020

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Abstract:

While there is a long history of mapping health issues, this paper focuses specifically on the development of audiences for public health maps in the United States (Koch, 2006). As the ongoing COVID-19 pandemic has shown, maps of public health events have become essential tools for the public and policymakers alike in navigating the pandemic (Dong et al., 2020). The development of these maps, literally overnight in February and March 2020, are the culmination of a century's worth of changing conceptions about the role of maps in American society. I trace the genealogy of these "instantaneous" public health maps back to 1920s Chicago, and desires by social scientists, reformers, and government officials to better control public health issues (Steadman, 1930). This innovative work developed in Chicago was then rolled out across the United States in the 1930s and 1940s through New Deal-era make-work programs and other government initiatives, leading to some of the first standardized statistics about public health conditions in the 1950s (May, 1950). This work formed the basis of the emerging fields of medical geography and statistical public health, but during 1976 with outbreaks of the then-novel Legionnaires' disease and swine flu, maps were largely reduced to minor roles. It was only with the emergence of HIV/AIDS and the beginning of desktop GIS computing in the 1980s that public health mapping reemerged as a potential area of focus, one that largely informed mainstream academic cartography research and pioneered the development of interactive maps well into the 2010s (Gould, 1989; MacEachren et al., 2008). By examining how cartographic display technologies, public attitudes towards maps, new visualization techniques, and innovative data collection methodologies allowed the nature of public health maps to change, the paper argues that American cartographers generated an audience of map viewers over the decades that sought specific types of knowledge that public health maps were never intended to provide.

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