Cause-of-Death Charts

Colorful charts and graphs are an engaging way to display information. Five visually appealing pie charts preserved in the Minnesota State Archives are a historic example of this kind of data visualization. Created by the Minnesota Department of Health in the late 1800s, they depict the causes of death in the state, annually and by category. Each chart measures 22 inches in diameter and is painted with watercolor, which has remained surprisingly vibrant over the years. Four charts depict 1888, 1889, 1890, and 1892, while the fifth covers a five-year average, from 1887 to 1891.

These charts came to my attention when I was browsing Health Department records; the collection inventory noted that they had been retained for possible display value. Since the inventory offered no images or further description, I retrieved the charts and was amazed at how striking they were. I wanted to find out more about how they came to us, who made them, and why.

Minnesota HISTORY *Visit the app to see all five charts.*

The information on the charts is as interesting as their design. They document the biggest health concerns of the time and also provide a brief lesson in medical history. The field of medicine has changed dramatically since the 1880s, so it's worth comparing how illnesses were diagnosed then and how they are diagnosed today.

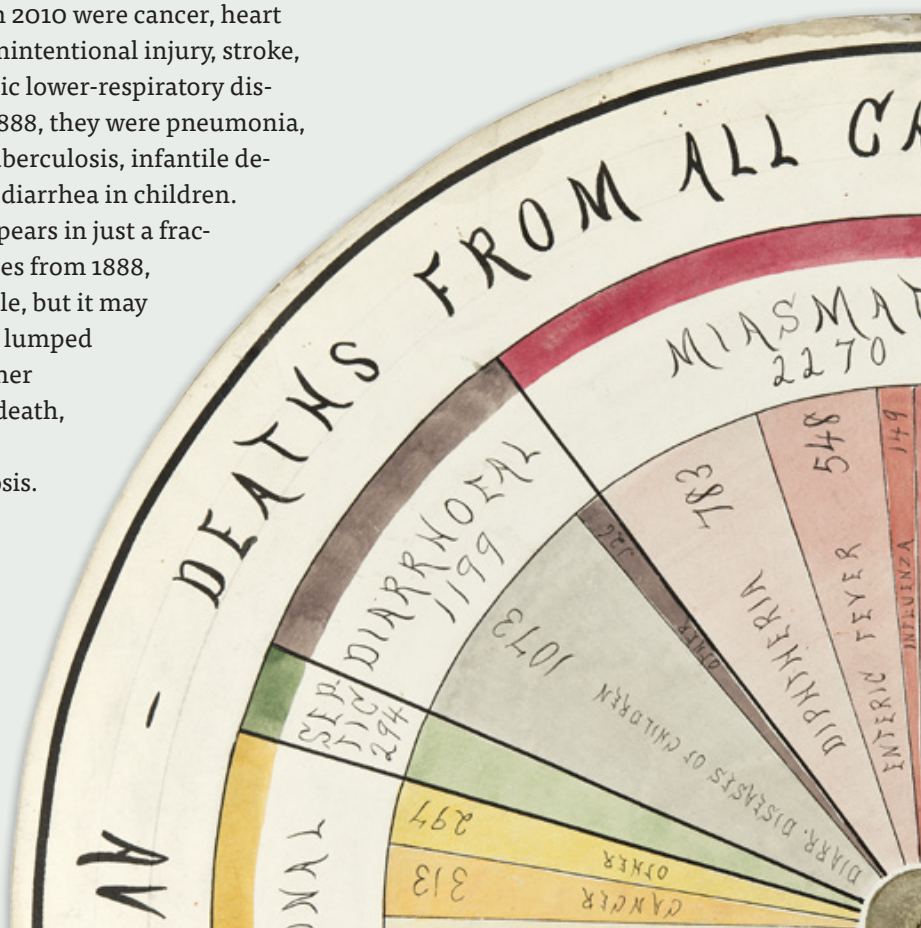
The charts employ terms that aren't used anymore, and their categories include both familiar and unfamiliar conditions: miasmatic (caused by foul-smelling, poisonous vapor in the air, e.g., diphtheria and typhoid, also known as enteric, fever), "diarrhoeal," septic, constitutional (e.g., tuberculosis), developmental, nervous (e.g., meningitis), circulatory, respiratory, digestive, accidents and negligence, and ill-defined or not specified—among others. According to the Minnesota Department of Health, the state's five leading causes of death in 2010 were cancer, heart disease, unintentional injury, stroke, and chronic lower-respiratory disease.* In 1888, they were pneumonia, old age, tuberculosis, infantile debility, and diarrhea in children. Cancer appears in just a fraction of cases from 1888, for example, but it may have been lumped in with other causes of death, a result of misdiagnosis.

I can only speculate as to the charts' use and how they got to MNHS. All appear to have been drafted by the same person, based on the handwriting, and to have hung on a wall, given the small holes in their centers. They may have served as easy visual guides to the most common fatal illnesses and conditions. I also imagine that someone on staff felt they were worth saving, based on their appearance, and knew that they should be preserved. Luckily for us, they were. The charts have been digitized and are available online through our library catalog: *http://tinyurl.com/zv327uz*

—Anjanette Schussler, government records assistant

*See *http://mn.gov/health-reform/images/WG-PPH-Statewide-Health-Assessment-2.pdf*

(JASON ONERHEIM/MNHS)



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