



Milwaukee Case Study:

Milwaukee in the early 1990s was home to 1.61 million people. The households were served by two water treatment plants but only one plant (the Howard Avenue Water Treatment Plant) was the source of the *Cryptosporidium* contamination.

Milwaukee receives its water from Lake Michigan. The origin of the contamination was found to be sewage that passed through the plant's filtration system. Where the sewage came from is still unknown but it might have been run off from a farm or feed lot.

During the time when sewage was passing through the system, turbidity levels were abnormal. There was no attempt at correcting the turbidity levels. Therefore, from March 23 to April 9, a total of 18 days, *Cryptosporidium* oocysts were free to contaminate the water system.

As a result of the outbreak, 403,000 people became ill and over 100 people died. The plant was shut down shortly after the outbreak occurred.

The estimated cost of this outbreak, as calculated by the Centers for Disease Control and Prevention, was \$96.2 million: \$31.7 in medical costs and \$64.6 million in lost productivity.

Sources:

- <https://wwwnc.cdc.gov/eid/>
- <http://grist.org/article/davidson/>
- https://en.wikipedia.org/wiki/1993_Milwaukee_Cryptosporidiosis_outbreak