

FDA uses genome sequencing to combat food-borne illnesses

Last week, two companies issued [national recalls of their products due to listeria](#) contamination. For Sabra Dipping Company, which is recalling 30,000 cases of hummus, no illnesses or deaths have been reported to the Centers for Disease Control (CDC) thus far. But for Blue Bell Creameries, the CDC has [confirmed a small number of cases in Kansas, resulting in three deaths](#). The company has since [expanded its recall](#) as well as [suspended operations at its Oklahoma plant](#). (The products being recalled are listed here.)

In recent years, the Food and Drug Administration (FDA) has started to use whole genome sequencing for outbreak investigations. Eric Brown, the director of the FDA's Division of Microbiology, explained that genome sequencing was initially brought to the organization for the purpose of discovering detailed genetic information for salmonella strains. In 2009, a [salmonella outbreak involving salami](#) resulted in the first pilot of using whole genome sequencing in identifying the harmful ingredient. Scientists analyzed pieces of nuts and vegetables in the salami to figure out what was tainted.

Errol Strain, a mathematical statistician at the FDA's Center for Food Safety and Applied Nutrition, said that whole genome sequencing is now being used in [real time for pathogens that cause food-borne illnesses](#). The information is stored on the FDA's publicly accessible database, [Genome Trakr](#).

Read full, original article: [Mapping Genomes to Understand Contaminated Foods](#)