The PRACTICAL Value of Food Pathogen Traceability through BUILDING a Whole-Genome Sequencing Network and Database

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Abstract
FDA has created U.S.-based open-source whole genome sequencing network of state, federal, international and commercial partners. The “GenomeTrakr” network, represents the first of its kind distributed genomic food shield for characterizing and tracing foodborne outbreak pathogens back to their source. The GenomeTrakr network is leading investigations of outbreaks of foodborne illnesses and compliance actions with more accurate and rapid recalls of contaminated foods as well as more effective monitoring of preventive controls for food manufacturing environments. An expanded network would serve to provide international rapid surveillance system for pathogen traceback, critical to support effective public health response to bacterial outbreaks.

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