

Moving towards better global foodborne disease surveillance

June 8 2017

Almost 1 in 10 people worldwide fall ill every year after eating contaminated food which commonly causes bacterial diarrhoea, resulting in 230 000 deaths each year.

In an article in *Eurosurveillance* PulseNet International advocates for <u>public health</u> institutes and laboratories around the world to move together towards the use of whole <u>genome sequencing</u> (WGS) to improve detection of and response to foodborne illnesses and outbreaks.

This will save lives and money due to the superior ability of WGS to link human cases with contaminated food sources.

PulseNet International is a global network of public <u>health laboratory</u> networks, dedicated to bacterial foodborne disease surveillance. The network is comprised of the national and regional laboratory networks of USA, Canada, Latin America and the Caribbean, Europe, Africa, the Middle-East and Asia Pacific.

The European Centre for Disease Prevention and Control (ECDC) manages the EU/EEA food- and waterborne diseases and zoonoses network of public health institutes and laboratories, which work to ensure comparability of data and further ties to the global health community.

Mike Catchpole, Chief Scientist at ECDC says, "it is important for all partners worldwide to continue to work together towards the



implementation and standardised analysis of whole genome sequencing."

The article also states that a global standard method for primary sequence data analysis based on whole genome Multiple Locus Sequence Typing (wgMLST) and derived public nomenclature will be adopted.

This will facilitate the sharing of information within regional and global public health laboratory networks, increasing efficiency and enabling data to be compared across countries in real-time which is currently not the case. This is especially important due to international travel and trade.

Common steps for validation studies, development of standardised protocols, quality assurance programmes and nomenclature have been agreed.

More information: *Eurosurveillance*, <u>DOI:</u> 10.2807/1560-7917.ES.2017.22.23.30544

Provided by European Centre for Disease Prevention and Control (ECDC)

Citation: Moving towards better global foodborne disease surveillance (2017, June 8) retrieved 4 May 2024 from <u>https://medicalxpress.com/news/2017-06-global-foodborne-disease-</u> <u>surveillance.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.