

Technical University of Denmark



WHO Global Foodborne Infections Network (GFN): Over 10 years of strengthening national capacities to detect and control foodborne and other enteric infections globally

Ayele, M.; DeLong, S. M.; Lo Fo Wong, D. M. A.; Wagenaar, J. A.; Karlsmose Pedersen, Susanne; Maxwell, N.; Knope, K.; Chiller, T.

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WHO Global Foodborne Infections Network (GFN): Over 10 years of strengthening national capacities to detect and control foodborne and other enteric infections globally

M. Ayele¹, S.M. DeLong¹, D.M.A. Lo Fo Wong², J.A. Wagenaar³, S. Karlsmose⁴, N. Maxwell⁵, K. Knope⁶, T. Chiller¹, and GFN Members

¹Division of Foodborne, Waterborne, and Environmental Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States, ²World Health Organization, Geneva, Switzerland, ³Utrecht University, the Netherlands, ⁴WHO Collaborating Centre for Antimicrobial Resistance in Foodborne Pathogens and EU Reference Laboratory for Antimicrobial Resistance, National Food Institute, Copenhagen, Denmark, ⁵PulseNet International, Centers for Disease Control and Prevention, Atlanta, GA, United States, ⁶OzFoodNet, Office of Health Protection, Department of Health and Ageing, Canberra, Australia

Our Mission

To enable countries to detect, control, and prevent foodborne and other enteric infections through

- Building capacity for integrated surveillance
- Fostering collaboration among human health, veterinary, food and other relevant sectors

Background

- Network launched as WHO Global Salm-Surv in 2000
- Strengthens national capacities to conduct laboratory-based foodborne disease surveillance and response
- Promotes collaboration between epidemiologists and microbiologists working in the public health, animal, and food sectors
- Technical and financial support provided by eleven Steering Committee Partners and GFN Regional Centers of Excellence



Eleven Steering Committee Partners

Methods

(Inter)national Training Activities

Laboratory training

- Isolation and identification of pathogens (e.g. *Salmonella*, *Campylobacter*, *E. coli*, *V. cholerae*, *S. Typhi*, *Brucella*, *Shigella*, *Listeria*, *C. botulinum*)
- Subtyping
- Biosafety and quality assurance

Epidemiology training

- Outbreak detection and response
- Evaluation of surveillance systems
- Study design
- Source attribution
- Burden of illness

Joint epidemiology and laboratory training

- Integrated surveillance
- Risk assessment
- Country Plans of Action
- Advocacy and communication
- Information sharing networks

External Quality Assurance System (EQAS)

- Tests laboratories' abilities to conduct serotyping and antimicrobial susceptibility testing of selected foodborne and enteric pathogens

Country Databank

- A global passive surveillance system of the top 15 *Salmonella* serotype data for humans, animals, feed, and the environment per country
- Contains a database of GFN Member Contact Information

Focused Regional and National Projects

- Pathogen-specific projects
- Burden of illness studies
- Enhanced surveillance studies

Reference Services

- Verification of findings
- Reply to technical questions
- Laboratory manuals

Communication

- An electronic discussion group (EDG)
- Newsletters and publications
- Websites

<http://www.who.int/gfn>



Epidemiology training session at a GFN Course

Conclusion

- GFN has increased the capacity of nations to effectively conduct laboratory-based surveillance and response
- Future network initiatives will focus on continued enhancement of systems, data collection, focused projects and training course follow-up



GFN Training Sites and proposed Training Sites



Laboratory training session at a GFN course

Results

Training Activities

- Conducted 74 international courses at 18 sites
- Provided training to more than 1,200 microbiologists and epidemiologists from more than 140 countries

External Quality Assurance System (EQAS)

- 180 laboratories participating in its current cycle

Country Databank

- 1633 members from 180 countries and 1081 datasets from 84 countries

Focused Regional and National Projects

- Projects include microbial characterization and enhanced surveillance initiatives in Asia, Africa, and Central America

Reference Services

- More than 30 lab courses and site visits
- More than 20 laboratory manuals developed

Communication

- More than 250 EDG messages distributed
- More than 25 articles published on GFN projects in the international peer-reviewed literature