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


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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

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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

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

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

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

- 1,633 members from 180 countries and 1,081 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

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

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