

Shigella spp.

Shigella is a Gram-negative foodborne pathogen that is closely related to *E. coli* and *Salmonella*¹. A publication by Scallan et al.² in 2011 estimated that 131,254 human foodborne shigellosis cases, including 10 deaths, occur annually in the US. Three *Shigella* groups are the major disease-causing species: *S. flexneri*, which is the most frequently isolated species of *Shigella* worldwide (accounting for 60% of cases in developing countries); *S. sonnei*, which causes 77% of cases in developed countries; and *S. dysenteriae*, which is usually the cause of epidemics of dysentery, particularly in confined populations such as refugee camps³.

Key laboratories studying various aspects of foodborne shigellosis in the US and Canada include:

Ramakrishna Nannapaneni, Mississippi State University, USA

Barakat Mahmoud, Mississippi State University, USA

Keith R. Schneider, University of Florida, USA

Key laboratories studying various aspects of foodborne shigellosis in Europe include:

Catarina Mammina, Italy

S. Ethelberg, Statens Serum Institut (Danish National Institute of Health, SSI), Denmark

Key laboratories studying various aspects of foodborne shigellosis in South and Latin America include:

Key laboratories studying various aspects of foodborne shigellosis in Asia and Australia include:

Additional resources on *Shigella* spp.:

A number of key sources on *Shigella* spp. and shigellosis are available. For a comprehensive overview on *Shigella*, we suggest the book "[A Guide to Foodborne Pathogens](#)" or "[Foodborne Pathogens: Microbiology and Molecular Biology](#)". For public health advice on how to reduce the risk of shigellosis infections, a number of WWW pages are available from the US CDC, including a factsheet on "[Shigellosis](#)" and also a brief overview of "[Shigella and Drinking Water from Private Wells](#)". Also, from the WHO a guide on world disease burden of *Shigella* "[WHO: Diarrhoeal Diseases](#)."

References

¹<http://en.wikipedia.org/wiki/Shigella>

²Scallan et al. 2011. Emerging Infectious Diseases 17:7-15 PMID:[21192848](#)

³http://www.who.int/vaccine_research/diseases/diarrhoeal/en/index6.html

⁴B. L. Nygren et al. 2012. Foodborne outbreaks of shigellosis in the USA, 1998--2008. Epidemiology and Infection. FirstView Article : pp 1-9; <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=8498869>.

If you want to edit or add to this entry please contact Anna Van Stelten at anna.vanstelten@gmail.com