Results of Searchers for Articles on
Chronic Sequellae to Foodborne Pathogens

Included in Scallan et al. _Major Pathogens (2011)_
but Not Included in 2014 ERS Cost of Foodborne Illness Estimates

Sandy Hoffmann
Washington, DC
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Preliminary Search for Information on Chronic Sequelae Associated with “Major Foodborne Pathogens” (Scallan et al. 2011) Not Included in Current ERS Cost of Illness Estimates.

In general, it looks as though the pathogens included in Scallan et al (2011) “Major Pathogens” that were not included in the ERS Cost of Foodborne Illness estimates have not been found to commonly result in serious sequelae.

The exceptions are:

Nutrient malabsorption (presumably not in the U.S.): Rotavirus, ETEC, *Giardia intestinalis*,

Brucella:

“20-60% of patients may develop osteoarticular complications, sacroiliitis (inflammation of the sacroiliac joint, genitourinary complications, cardiovascular and neurological conditions, insomnia, and depression” Motarjemi in Blackburn & McClure (eds.) Foodborne Pathogens (CRC Press) (2002).

*Mycobacterium bovis*

Possibly IBD (unclear from Lindsay (1997) whether all *Mycobacterium* or only *M. paratuberculosis* is linked to IBD).

*Staphylococcus aureus*

Autoimmune disorders due to superantigen production (Lindsay (1997)

Endocarditis noted in several studies.

*Streptococcus* spp., Group A

Autoimmune disorders due to superantigen production (Lindsay (1997)

ReA

*Trichinella*

Cardiac and neurological complications, chronic muscle pain
Google Scholar Searches run:

“Bacillus cereus” “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

Brucella “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

“Clostridium botulinum” “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

ETEC “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

“Mycobacterium bovis” “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

“S. enterica” Typhi “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

“Staphylococcus aureus” “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

Streptococcus “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

“Streptococcus, Group A” “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

“Cyclospora cayetanensis” “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

“Giardia intestinalis” “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

Trichinella “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

Astrovirus “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

“Hepatitis A” “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

Rotavirus “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”

Sapovirus “long term consequence” OR “chronic sequelae” OR “long term outcome” OR “long-term consequence” OR “long-term outcome”
Readings identified that may be of interest regarding chronic disease burden of these pathogens:

**Bacillus cereus**


**Brucella**

"20-60% of patients may develop osteoarticular complications, sacroiliitis (inflammation of the sacroiliac joint, genitourinary complications, cardiovascular and neurological conditions, insomnia, and depression” Motarjemi in Blackburn & McClure (eds.) Foodborne Pathogens (CRC Press) (2002).

**ETEC**


**Mycobacterium bovis**

Possibly IBC (unclear from Lindsay (1997) whether all *Mycobacterium* or only *M. paratuberculosis* is linked to IBD).

**S. enterica** *Typhi*

Rate of sepsis may vary with genus or serovar

**Staphylococcus aureus**

complications: bacteremia

Possible long term seqelae: bacteremia/septicemia relapse


**Streptococcus spp., Group A**

Autoimmune disorders due to superantigen production (Lindsay (1997)

**Giardia intestinalis**


Hypothyroidism if giardiasis due to *Giardia lamblia* is untreated (unclear whether this is also the case for *G. intestinalis*) (Lindsay 1997)

**Trichinella**


**Hepatitis A**

Chronic sequelae are rare. Lindsay (1997)

**Rotavirus**

Nutrient malabsorption (if diarrheal episodes become chronic). (Lindsay 1997)