Conference for Food Protection
2014 Issue Form

Internal Number: 017
Issue: 2014 I-021

Council Recommendation:	Accepted as Submitted	_____	Accepted as Amended	_____	No Action	_____
Delegate Action:	Accepted	_____	Rejected	_____		

All information above the line is for conference use only.

Title:
Sore Throat with Fever

Issue you would like the Conference to consider:
The 2013 FDA Food Code, section 2-201.13(G) requires a person with sore throat and fever to not return to work until they have medical documentation of being free of *Streptococcus pyogenes* or have received professional medical treatment for same.
This release from exclusion requirement goes above and beyond what is required for other reportable symptoms. Additionally, *Streptococcus pyogenes* is not one of the big six reportable diagnosed illnesses.

Public Health Significance:
A sore throat is a frequent symptom of the common cold or other acute respiratory tract infections. According to CDC's "Get Smart: Know When Antibiotics Work" found at http://www.cdc.gov/getsmart/index.html, most sore throats are a symptom of the common cold or an upper respiratory infection, which are caused by viruses. Therefore, Group A streptococcus is not the primary concern for a sore throat with fever. From the Science Daily in September 2012,
http://www.sciencedaily.com/releases/2012/09/120910122608.htm regarding published guidelines by the Infectious Diseases Society of America
"About 15 million people in the U.S. see the doctor for a sore throat every year and up to 70 percent receive antibiotics, although only a smaller percentage actually have strep throat: approximately 20 to 30 percent of children and just 5 to 15 percent of adults."
The guidelines note that children and adults do not need to be tested for strep throat if they have a cough, runny nose, hoarseness and mouth sores, which are strong signs of a viral throat infection.
In the last thirty years, only three foodborne illness outbreaks are confirmed to be associated with Streptococcus Group A (two in 1984 and one in 2012). Taking into account the number of people seen in a single year for sore throat with fever and the associated risk to food borne disease transmission, the hazard does not support the need for such a restrictive requirement to reinstate a food employee who was excluded only after they have seen a health practitioner, without a diagnosis of strep throat. Compared to the number of people seen for vomiting and diarrhea in a single year, and the number of outbreaks

associated by the two symptoms, this removal of exclusion requiring only 24 hours asymptomatic in order to be reinstated, is far less restrictive.
In terms of public health safety, there is reason to associate sore throat with fever as less of a risk than vomiting and diarrhea, therefore the Food Code requirements for removing the exclusions and restrictions for sore throat and fever should reflect the same requirements as found under vomiting and diarrhea.

Recommended Solution: The Conference recommends...:
that a letter be sent to the FDA recommending amending the 2013 Food Code by adding a new subparagraph to Section 2-201.13(G) as follows (new language is in underline format):
(4) Is ASYMPTOMATIC for at least 24 hours [P]

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Attachments:

- "CDC 2011 Foodborne Illness Estimates"
- "CDC Estimates - Top 5 pathogens contributing to foodborne illness"
- "Trends in Foodborne Illness in the US"
- "CDC Get Smart: Know when antibiotics work - Sore throat"

It is the policy of the Conference for Food Protection to not accept Issues that would endorse a brand name or a commercial proprietary process.

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CDC 2011 Estimates: Findings

CDC estimates that each year roughly 1 in 6 Americans (or 48 million people) gets sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases.

Please visit the CDC Online Newsroom (/media/) for the December 15, 2010 media briefing (/media/pressrel/2010/a101215.html) , transcript (/media/transcripts/2010/t101215.html) , and press release (/media/pressrel/2010/r101215.html) ; read our feature on (/Features/dsFoodborneEstimates/) 2011 Estimates of Foodborne illness in the United States; and also hear the Emerging Infectious Diseases (http://wwwnc.cdc.gov/eid/content/17/1/contents.htm Podcast: New U.S. Foodborne Illness Estimates (http://www2c.cdc.gov/podcasts/player.asp?f=4485979)

CDC has estimates for two major groups of foodborne illnesses:

Known foodborne pathogens — 31 pathogens known to cause foodborne illness. Many of these pathogens are tracked by public health systems that track diseases and outbreaks.

***Unspecified agents** — Agents with insufficient data to estimate agent-specific burden; known agents not yet identified as causing foodborne illness; microbes, chemicals, or other substances known to be in food whose ability to cause illness is unproven; and agents not yet identified. Because you can't "track" what isn't yet identified, estimates for this group of agents started with the health effects or symptoms that they are most likely to cause—acute gastroenteritis.

Table 1. Estimated annual number of domestically acquired, foodborne illnesses, hospitalizations, and deaths due to 31 pathogens and unspecified agents transmitted through food, United States

Foodborne Agents	Estimated annual number of illnesses (90% credible interval)	%	Estimated annual number of hospitalizations (90% credible interval)	%	Estimated annual number of deaths (90% credible interval)	%

31 known pathogens	9.4 million (6.6–12.7 million)	20	55,961 (39,534–75,741)	44	1,351 (712–2,268)	44
Unspecified agents	38.4 million (19.8–61.2 million)	80	71,878 (9,924–157,340)	56	1,686 (369–3,338)	56
Total	47.8 million (28.7–71.1 million)	100	127,839 (62,529–215,562)	100	3,037 (1,492–4,983)	100

To estimate the total number of foodborne illnesses, CDC estimated the number of illnesses caused by both known and unspecified agents. We also estimated the number of hospitalizations and deaths caused by these illnesses. Table 1 provides the estimates due to known pathogens, unspecified agents, and the total burden.

Pathogens causing the most illnesses, hospitalizations, and deaths each year

Eight known pathogens account for the vast majority of illnesses, hospitalizations, and deaths. Tables 2–4 list the top five pathogens causing illness, hospitalization, and death.

Table 2. Top five pathogens contributing to domestically acquired foodborne illnesses

Pathogen	Estimated number of illnesses	90% Credible Interval	%
Norovirus (/ncidod/dvrd/revb/gastro/norovirus.htm)	5,461,731	3,227,078 – 8,309,480	58
Salmonella *(/salmonella/index.html)* **, nontyphoidal**	1,027,561	644,786–1,679,667	11
Clostridium perfringens *(/foodborneburden/clostridium-perfringens.html)*	965,958	192,316–2,483,309	10
Campylobacter spp *(/nczved/divisions/dfbmd/diseases/campylobacter/)* **. (/nczved/divisions/dfbmd/diseases/campylobacter/)**	845,024	337,031–1,611,083	9
Staphylococcus aureus *(/nczved/divisions/dfbmd/diseases/staphylococcal/)*	241,148	72,341–529,417	3
Subtotal			91

Table 3. Top five pathogens contributing to domestically acquired foodborne illnesses resulting in hospitalization

Pathogen	Estimated number of hospitalizations	90% Credible Interval	%
Salmonella *(/salmonella/index.html)* **, nontyphoidal**	19,336	8,545–37,490	35

Norovirus (/ncidod/dvrd/revb/gastro/norovirus.htm)	14,663	8,097–23,323	26
Campylobacter spp *(/nczved/divisions/dfbmd/diseases/campylobacter/)* **. (/nczved/divisions/dfbmd/diseases/campylobacter/)**	8,463	4,300–15,227	15
Toxoplasma gondii *(/parasites/toxoplasmosis/)*	4,428	3,060–7,146	8
E.coli *(/ecoli/)* **(STEC) O157 (/ecoli/)**	2,138	549–4,614	4
Subtotal			88

Table 4. Top five pathogens contributing to domestically acquired foodborne illnesses resulting in death

Pathogen	Estimated number of deaths	90% Credible Interval	%
Salmonella *(/salmonella/index.html)* **, nontyphoidal**	378	0–1,011	28
Toxoplasma gondii *(/parasites/toxoplasmosis/)*	327	200–482	24
Listeria monocytogenes *(/nczved/divisions/dfbmd/diseases/listeriosis/)*	255	0–733	19
Norovirus (/ncidod/dvrd/revb/gastro/norovirus.htm)	149	84–237	11
Campylobacter spp. *(/nczved/divisions/dfbmd/diseases/campylobacter/)*	76	0–332	6
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Page last reviewed: January 8, 2014
Page last updated: January 8, 2014
Content source: Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)
Division of Foodborne, Waterborne, and Environmental Diseases (DFWED)

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CDC Estimates of Foodborne Illness in the United States

FINDINGS

CDC 2011 Estimates

CDC estimates that each year roughly 1 in 6 Americans (or 48 million people) gets sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases. The 2011 estimates provide the most accurate picture yet of which foodborne bacteria, viruses, microbes ("pathogens") are causing the most illnesses in the United States, as well as estimating the number of foodborne illnesses without a known cause.* The estimates show that there is still much work to be done—specifically in focusing efforts on the top known pathogens and identifying the causes of foodborne illness and death without a known cause.

Reducing foodborne illness by 10% would keep about 5 million Americans from getting sick each year.

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National Center for Emerging & Zoonotic Infectious Diseases
Division of Foodborne, Waterborne, and Environmental Diseases

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Trends in Foodborne Illness in the United States, 2012

Documenting trends—which illnesses are decreasing and increasing—is essential for monitoring our progress in reducing foodborne illness.

Each year, foodborne illness, commonly known as food poisoning, affects about 48 million people in the United States. Food poisoning can happen anywhere, to anyone, and from foods we might not expect. Public health surveillance, such as that conducted by the Foodborne Diseases Active Surveillance Network (FoodNet), provides needed data for tracking trends.

FoodNet: Report Card for Food Safety

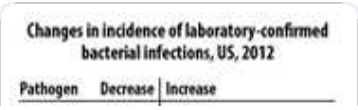
Report Card (larger version (reportcard.html))
Download PDF [PDF - 1.14MB] (food-safety-progress-report-2012-508c.pdf)

Each year, FoodNet reports on the changes in the number of people sickened with foodborne infections that have been confirmed by laboratory tests.

Foodborne diseases monitored through FoodNet include infections caused by the bacteria *Campylobacter*, *Listeria*, *Salmonella*, Shiga toxin-producing *E. coli* (STEC) O157 and non-O157, *Shigella*, *Vibrio*, and *Yersinia*, and the parasites *Cryptosporidium* and *Cyclospora*. The data collected by FoodNet also lets CDC, its partners, and policy makers know how much progress has been made in reaching national goals (http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=14) (http://www.cdc.gov/Other/disclaimer.html) for reducing foodborne illness.

Highlights of the 2012 FoodNet Data

Data from FoodNet, which monitors 15% of the US population, provide the best measure of trends in foodborne disease in the United States. Overall, the 2012 FoodNet data showed a lack of recent progress in reducing foodborne infections and highlight the need for improved prevention.



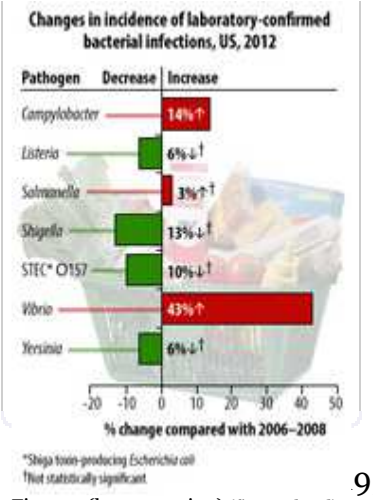


Figure 1 (larger version) (figure1.html)

9,531 laboratory-confirmed cases of infection.

- The incidences of laboratory-confirmed *Campylobacter*, C*ryptosporidium*, *Salmonella*, Shiga toxin-producing *Escherichia coli* (STEC) O157 and non-O157, *Shigella*, and *Yersinia* infection were highest among children aged <5 years.
    - The incidences of *Listeria* and *Vibrio* infection were highest in adults aged ≥65 years.
- The incidences of laboratory-confirmed *Listeria*, *Salmonella*, Shiga toxin-producing *Escherichia coli* (STEC) O157, and *Yersinia* infection did not change significantly in 2012 compared with 2006–2008.
- *Campylobacter* was the second most common infection reported in FoodNet (14.3 cases reported per 100,000 population). Incidence of infection was 14% higher in 2012 compared with 2006–2008.
    - *Campylobacter* infections are usually self-limited, but may result in severe complications such as Guillain-Barré syndrome (a type of paralysis), and arthritis.
    - Exposures related to *Campylobacter* infection include consumption of undercooked poultry, raw milk, produce, untreated water, and contact with young animals.
- *Vibrio* infections are rare (0.41 cases reported per 100,000 population). Incidence of *Vibrio* infection was 43% higher in 2012 compared with 2006–2008.
    - Some types of *Vibrio* infections are often serious.
    - Many *Vibrio* infections are acquired by eating raw oysters. These infections are most common during warmer months when waters naturally contain more Vibrio organisms.
    - Infections can be prevented by thoroughly cooking oysters and by not exposing wounds to bodies of warm seawater.
- As a group, the incidence of infection with six key pathogens transmitted commonly through food (*Campylobacter, Listeria, Salmonella*, *E. coli* O157, *Vibrio,* and *Yersinia*) was not significantly different in 2012 than in 2006–2008.

Long-term Trends

Comparison with the first three years of FoodNet surveillance (1996–1998) shows some clear changes:

- The incidence of infections caused by *Campylobacter*, *Listeria*, STEC O157, *Shigella*, and *Yersinia* has declined, mostly in the first years.
- The overall incidence of *Salmonella* was unchanged, but the incidence of some types of *Salmonella* have increased while others have decreased.
- The incidence of *Vibrio* infection is now 116% higher.
- The overall incidence of infection with six key foodborne pathogens (*Campylobacter*, *Listeria*, *Salmonella*, STEC O157, *Vibrio*, and *Yersinia*) was 22% lower.

Recent Efforts and Next Steps

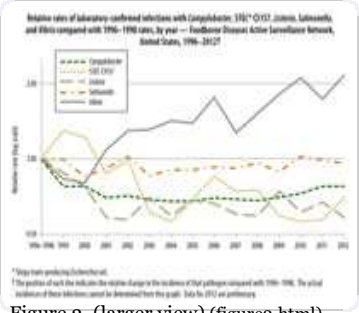


Figure 2 (larger view) (figure2.html)

Most foodborne illnesses can be prevented. Some progress has been made in decreasing contamination of some foods and reducing illness caused by some pathogens. Recent efforts to reduce contamination of food and prevent these illnesses include:

- Establishment in 2011 of performance standards for *Campylobacter* contamination of whole broiler chickens in processing plants.
- Approval of more stringent time and temperature controls for oysters after harvest to prevent *Vibrio vulnificus* infections.
- The Food Safety Modernization Act (http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm242500.htm) (http://www.cdc.gov/Other/disclaimer.html) of 2011: It gives FDA additional authority to regulate food facilities, establish standards for safe produce, recall contaminated foods, oversee imported foods, and which requires improvements in surveillance and response to outbreaks. It calls on CDC to strengthen surveillance and outbreak response.

More can be done. Determining where to target prevention efforts that will reduce foodborne infections requires continued collection of information to understand sources of infection, implementation of measures known to reduce food contamination, and development of new measures.

Key Web Links

- FoodNet (Foodborne Diseases Active Surveillance Network) (http://www.cdc.gov/foodnet/)
- CDC's Estimates of Foodborne Illness in the United States (http://www.cdc.gov/foodborneburden/index.html)
- CDC and Food Safety (http://www.cdc.gov/foodsafety/)
- Foodsafety.gov (http://www.foodsafety.gov/) (http://www.cdc.gov/Other/disclaimer.html)
- CDC's Division of Foodborne, Waterborne, and Environmental Diseases (http://www.cdc.gov/ncezid/dfwed/)
- United States Department of Agriculture's Food Safety and Inspection Service (USDA/FSIS)) (http://www.fsis.usda.gov/) (http://www.cdc.gov/Other/disclaimer.html)
- United States Food and Drug Administration (FDA) (http://www.fda.gov/default.htm) (http://www.cdc.gov/Other/disclaimer.html)

Page last reviewed: April 18, 2013
Page last updated: April 18, 2013
Content source: National Center for Emerging and Zoonotic Infectious Diseases, Division of Foodborne, Waterborne, and Environmental Diseases
Page maintained by: Office of the Associate Director for Communication, Digital Media Branch, Division of Public Affairs

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Sore Throat

Español: Dolor de garganta (/getsmart/antibiotic-use/URI/sore-throat-sp.html)

Overview of a Sore Throat

A sore throat often makes it painful to swallow. A sore throat can also feel dry and scratchy. A sore throat is a frequent symptom of the common cold or other acute respiratory tract infections. In some cases, a lab test will need to be done to determine if you or your child needs antibiotics.

Causes of a Sore Throat

- Most sore throats are caused by viruses, like ones that cause a cold or the flu
- Some sore throats, like strep throat, are caused by bacteria; strep throat is caused by Group A *streptococcus* (http://www.cdc.gov/ncidod/dbmd/diseaseinfo/groupastreptococcal_g.htm) (strep-tuh-KOK-us)
- Other causes include:
  - Allergies
  - Dry air
  - Pollution (airborne chemicals or irritants)
  - Smoking or exposure to second hand smoke

Signs and Symptoms of a Viral Infection Accompanied by a Sore Throat

- Sneezing
- Cough
- Watery eyes
- Mild headache
- Mild body aches
- Runny nose
- Low-grade fever (less than 102°F)

See a Healthcare Provider if You or Your Child has:

- A sore throat that lasts longer than 1 week
- Difficulty swallowing or breathing
- Excessive drooling (young children)
- Temperature higher than 100.4° F
- Pus on the back of the throat
- Rash
- Hoarseness (http://www.nlm.nih.gov/MEDLINEPLUS/ency/article/003054.htm) (http://www.cdc.gov/Other/disclaimer.html) lasting longer than 2 weeks
- Blood in saliva or phlegm