

# NOROVIRUS SEASON

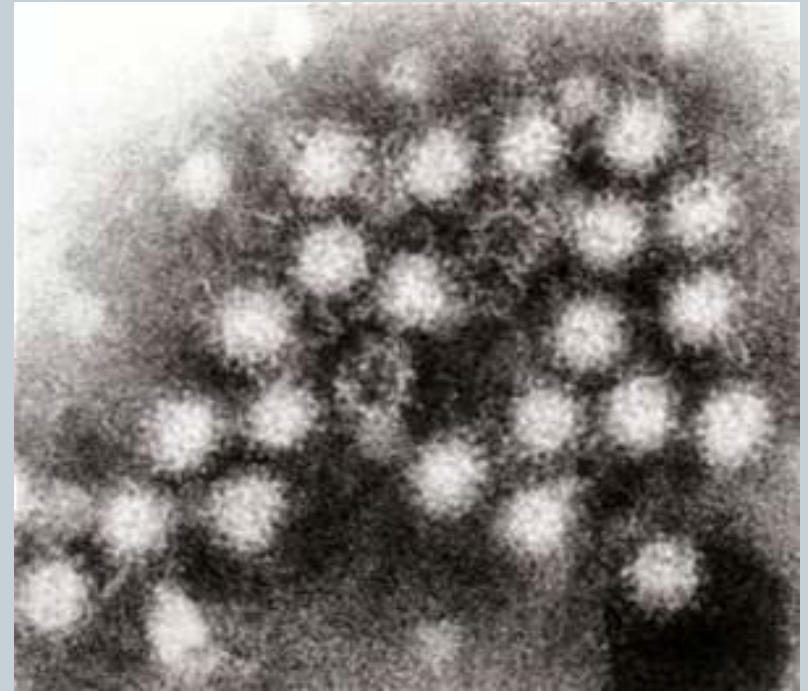


## WAYS TO PREVENT A NOROVIRUS OUTBREAK IN YOUR FACILITY

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# What is Norovirus?

- A very contagious virus named after Norwalk, Ohio where the first confirmed outbreak occurred in 1968
- Sometimes mistakenly referred to as “stomach flu”
- 19-21 million illnesses and 570-800 deaths per year attributed to Norovirus



# Symptoms and Severity



- Symptoms: diarrhea, vomiting, nausea, stomach pain
- Occasionally low grade fever, headache and body aches
- Symptoms occur 12-48 hours after ingesting the virus
- Lasts for a few days

# Common



- #1 cause of foodborne illness outbreaks in the US
- Outbreaks on cruise ships are well publicized, but only 1% of outbreaks.



# Effects on a Food Service Setting



- Infected food workers are responsible for 70% of all norovirus outbreaks
- Media attention: public associates restaurant with poor food handling and uncleanliness
- Potential drop in business and damaged reputation
- <http://kstp.com/article/stories/s3668998.shtml>

# Outbreaks this Season



- **Norovirus is hitting hard this winter season**
- **40+ outbreaks of norovirus in Minnesota**
  - 15 confirmed restaurant outbreaks
  - 10 confirmed school outbreaks
- **2 outbreaks of norovirus in Bloomington**

# Case 1



- Large restaurant at MOA
- Ill patrons ate at restaurant the Sunday after Thanksgiving
- Group of 10 dined there
  - 5 of the 10 were ill
  - 4 of these were laboratory confirmed
  - Lived in 5 households
- 9 ill employees from November 24<sup>th</sup>- December 5<sup>th</sup>
  - 4 were recorded on illness log

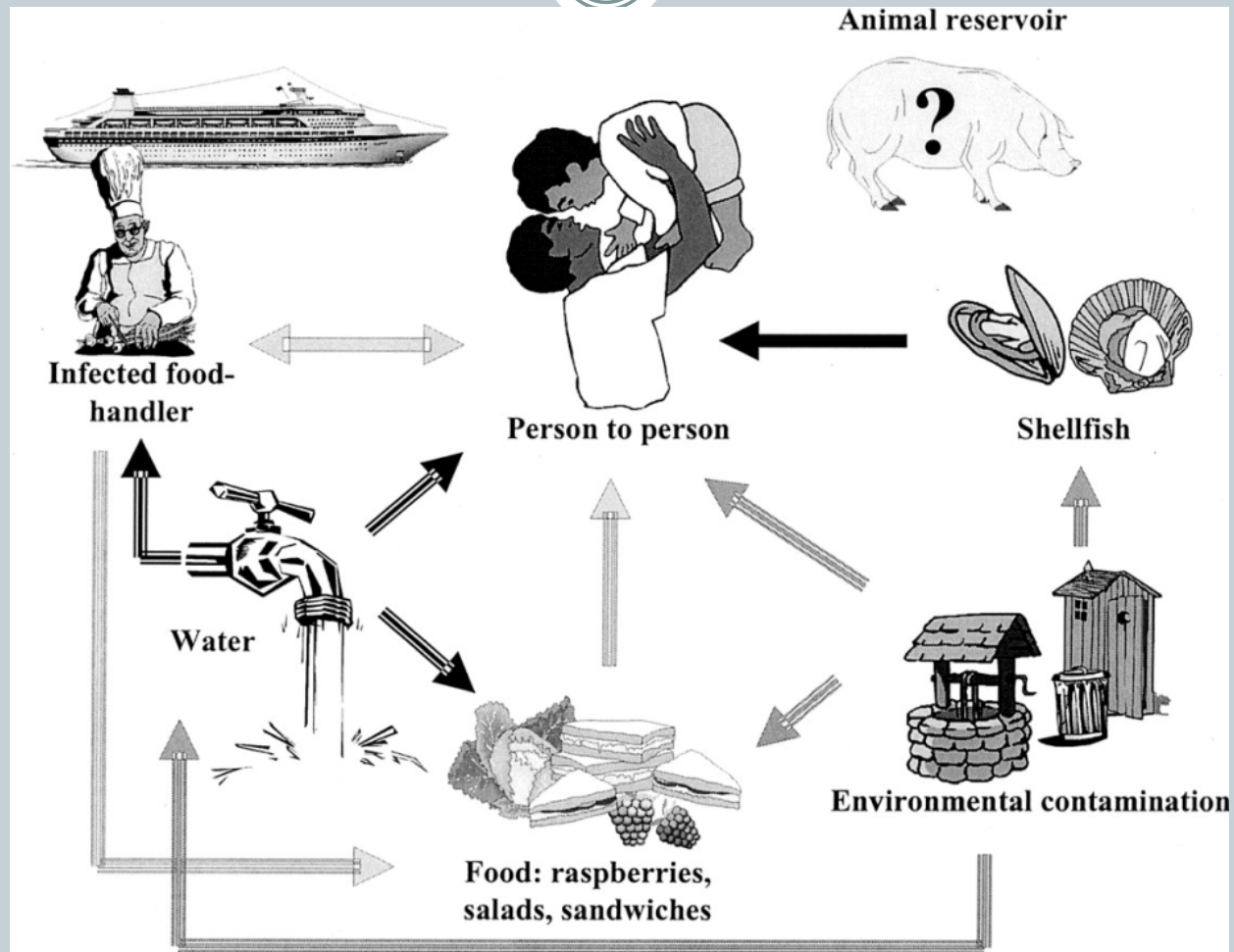
# Case 2



- Large Restaurant at MOA
- Ill patrons ate at restaurant on January 5<sup>th</sup> and 6<sup>th</sup>
- 9 patrons had symptoms of norovirus
  - 2 of these were laboratory confirmed
- 4 ill employees from December 22<sup>nd</sup> - January 6<sup>th</sup>
  - 1 different employee was listed on illness log



# How is it transmitted?



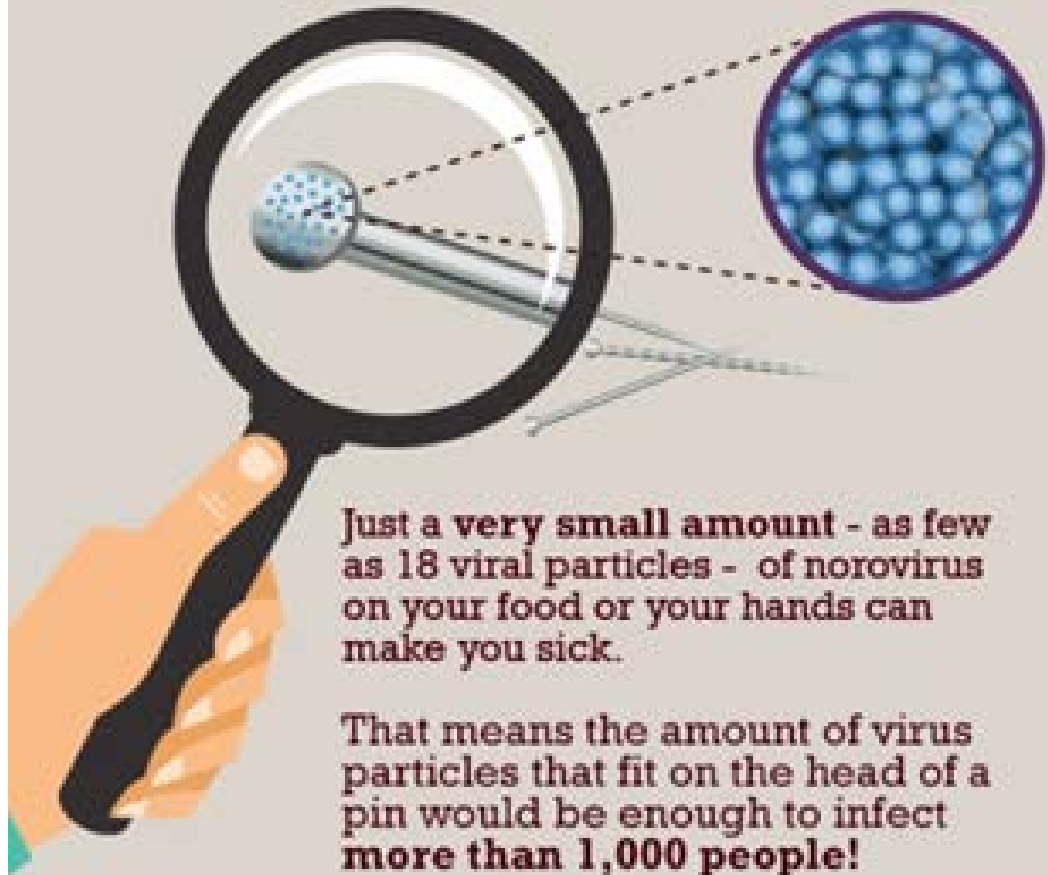
## Transmission

\*Can spread quickly in close environments such as health care settings, schools, cruise ships

\*Most outbreaks occur between November and April

\*Recent Outbreaks: Infected food service workers like servers, not just kitchen staff

### How contagious is norovirus?



SOURCE: Journal of Medical Virology, August, 2008

# Lots of Viruses



Up to 100  
billion viruses  
per gram of  
feces

As few as 18  
viruses  
needed to  
cause illness

Very  
contagious

# A Hardy Virus



- **Can get it more than once**
  - Some short term immunity after infection
- **Can be found in stool up to 4 weeks after symptoms subside**
- **Can live on surfaces for a long time**
- **Up to 1/3 of people may be asymptomatic**

# UK approach to Norovirus research



- <https://www.youtube.com/watch?v=pmy8x2Lm7rE>

# Proper Handwashing is Key

- After using the bathroom, changing diapers, before preparing food, after touching soiled utensils or linens
- Use warm soapy water and scrub hands for at least 20 seconds
- Rinse hands and forearms in warm water. Keep fingertips pointed down while rinsing.
- Dry hands with single-use paper towels. Turn off the faucet with paper towels to prevent re-contamination of hands.



# Hand Sanitizers

- Hand sanitizers are not a substitute for handwashing
- Handwashing is the most effective way to remove viruses



# No bare hand contact with RTE foods

- Ready to eat foods: fruits and vegetables, bread/rolls, cooked meats
- Use gloves and utensils
- Server and bartender tasks such as cutting lemons and limes, filling bread baskets





# Exclusion of ill workers

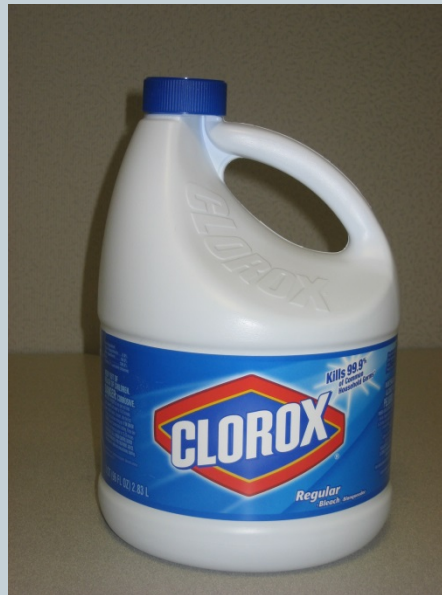


- Most contagious during illness and the first few days after symptoms end
- Employee illness log
- With Noro symptoms safe to exclude for 72 hours after symptoms end.

# Cleaning



- Norovirus is very hardy and can stay on surfaces for a long time
- Killing all norovirus on a surface took a 5000 ppm bleach solution 5 minutes



# Cleaning



- Kitchen surfaces cleaned and sanitized regularly (cutting boards, utensils, etc.)



# Cleaning



- Bathrooms must be thoroughly cleaned and sanitized regularly



# What can you do?



- **Have an environment that encourages employees to stay home while ill**
  - On call scheduling
  - Paid sick leave
- **Train your entire staff including servers, bussers and bartenders on**
  - The illness policy
  - Proper handwashing
  - No bare hand contact with ready to eat foods

# What can you do?



- **Cordon off areas where people have become ill and thoroughly clean and sanitize them.**
  - Use a bleach based sanitizer
- **Encourage employees who have ill household members to clean and sanitize the areas where that person was sick and practice good handwashing.**

# References



- Graham DY, Jiang X, Tanaka T, Opekun AR, Madore HP, Estes MK. Norwalk virus infection of volunteers: new insights based on improved assays. *J Infect Dis.* 1994;170:34–43
- Koo, H.; Ajami, N.; Atmar, R. and DuPont, H. (2010) Noroviruses: The Principal Cause of Foodborne Disease Worldwide. *Discovery Medicine*, Vol. 10(50), pp. 61-70.
- <http://www.cdc.gov/norovirus/index.html>