# Waterborne Disease Surveillance

# Recreational Water Illnesses

**Neurologic infections**
***Naegleria fowleri***

**Respiratory infections**
***Legionella*, chemicals**

**Skin infections**
***Pseudomonas*, chemicals, fungal infections**

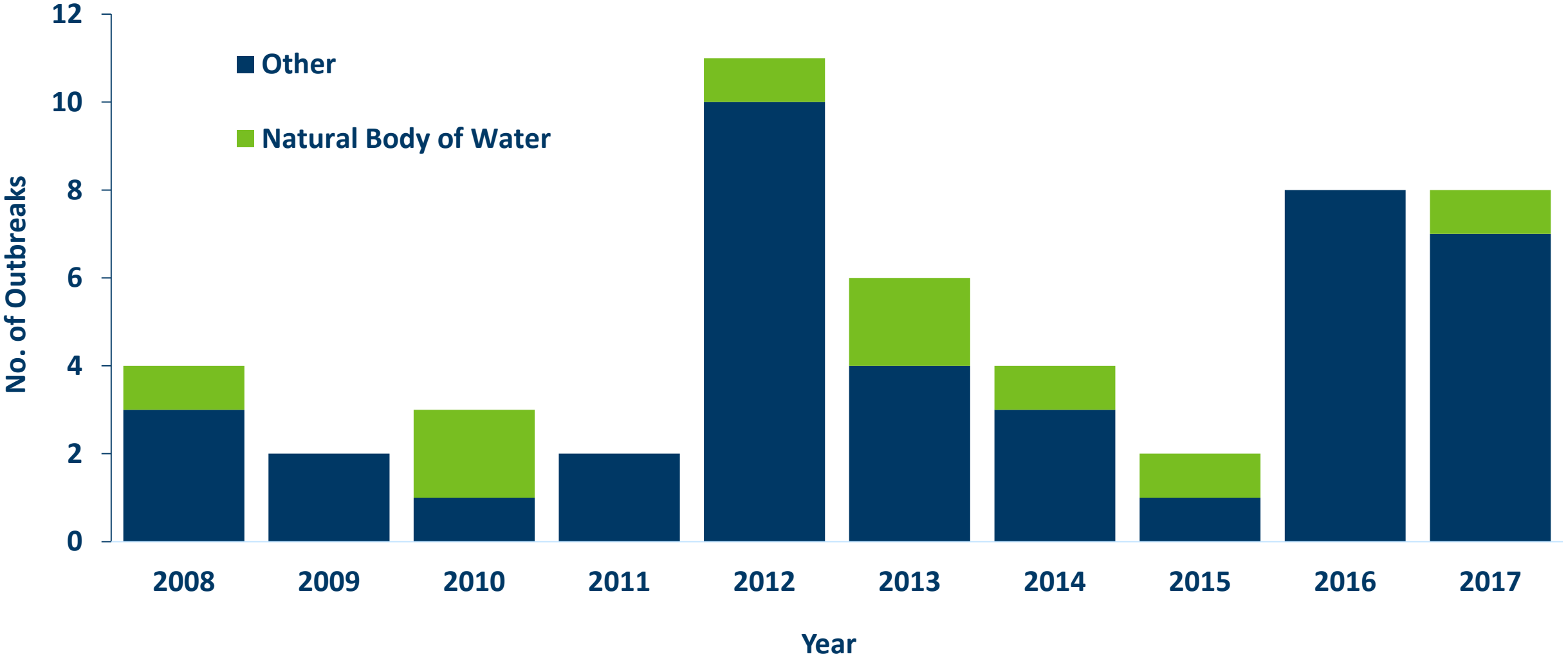
**Ear infections**
***Pseudomonas***

**Acute gastroenteritis**
***Cryptosporidium*, *Giardia*, *E. coli* O157, *Shigella*, Norovirus**

**Wound infections**
***Vibrio***

**Multiple manifestations**
**Cyanobacteria**

# Recreational Water Illness Outbreaks in Minnesota by Location, 2008-2017



# How Do We Detect Waterborne Outbreaks?

- Reportable diseases
  - Individual reported cases are interviewed, exposures compared to other reported cases
- Foodborne and Waterborne Illness Hotline
  - Notification by health care professionals or individuals of multiple illnesses from a common event
  - Multiple individual complaints about same pool, waterpark, or beach

# Reportable Pathogen Surveillance in Minnesota

- Clinical materials must be submitted to MDH for most pathogens
- Real-time PFGE or PCR subtyping on all specimens
- Routine, real-time interviews of all cases

# Minnesota Surveillance Philosophy

- Interview all cases ASAP
- Collect details on specific exposures
  - Dates
  - Names of pools, beaches, resorts, etc.
  - Addresses
- Investigation of all clusters
  - Intensity depends on the nature of the cluser
  - Follow leads aggressively

# Recreational Water Exposures

5. Did you go swimming in the 2 weeks **prior** to your illness, including at any pools, waterparks, lakes, wading pools, splash pads, etc.? ☐ Y ☐ N ☐ Unk

---If yes, **when** and **where** (name and location):

____/____/____ _____

____/____/____ _____

____/____/____ _____

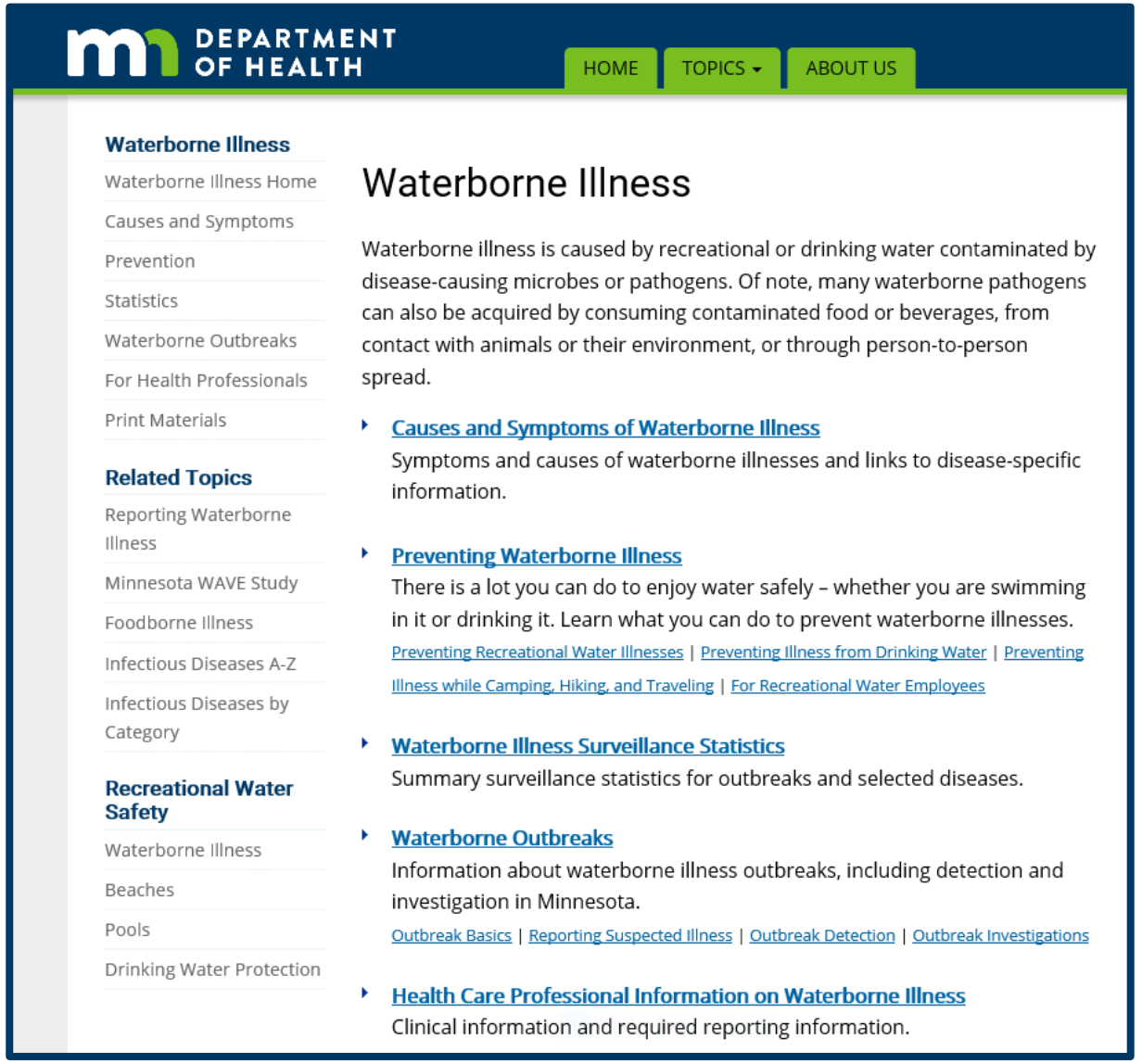
6. Have you gone swimming anywhere **since** your symptoms started? ☐ Y ☐ N ☐ Unk

---If yes, **when** and **where** (name and location):

____/____/____ _____

____/____/____ _____

# MDH Waterborne Illness Website



# Questions?

DEPARTMENT OF HEALTH
651-201-5414 or 1-877-676-5414
www.health.state.mn.us
IMPORTANT NOTICE TO ALL SWIMMERS
STOP
Stay out of the water if you have diarrhea.
Shower before you get in the water.
Don't swallow the water.
3/2017