

## Recreational Water Illness & Accidental Fecal Release

**Recreational Water Illness (RWIs)** are diseases that people can get from water that they swim or play in if the water contains germs. RWIs are caught by swallowing, breathing in mists, or coming in contact with contaminated water.

Type of RWI (from most common to least)	Most Common Symptoms	Facts
Cryptosporidium Crypto	Diarrhea & Vomiting	Lives in water for as long as 10 days Found in fecal matter Spread by swallowing contaminated water
Legionella	Diarrhea & Vomiting	Spread by inhaling water vapor, breathing in mists that are contaminated. Bacteria Found naturally in water- when not treated it can grow and become harmful Causes a life threatening pneumonia
Pseudomonas Hot Tub Rash	Skin Irritation & rash Ear aches Cough and Congestion	Germ that is found in the environment- soil, water, etc.. Spread just by touching the skin at an open point-like hair follicle
Norovirus	Diarrhea & Vomiting	Found in fecal matter and vomit Spread by swallowing contaminated water
Shigella	Diarrhea & Vomiting	Found in Fecal Matter Can live in water and on surfaces Spread by swallowing or touching a surface that is contaminated
Escherichia coli E. coli 0157:H7	Diarrhea & Vomiting	Bacteria that can live in water from animals or humans Spread by swallowing bacteria
Pool Chemical mistakes	Skin Irritation & rash Ear Aches Cough and Congestion Diarrhea & Vomiting	This happens when the pool has too much of a chemical and it harms the swimmer. Most comment is Chlorine and Acid burns.
Giardia	Diarrhea & Vomiting	Can live in water for up to 45 mins Found in fecal matter Spread by swallowing contaminated water

\*RWIs are usually diagnosed by health care professionals or sending water samples to be tested at a lab.

The best way to make sure you do not have a Recreational Water Illness outbreak at your facility is to make sure you do the following:

- ✓ Keep Chemical feed equipment and chemicals at correct levels
- ✓ Maintain a disinfectant level at least 2ppm
- ✓ Monitor Chlorine levels regularly- Chlorine is what kills RWIs
- ✓ Make sure filters are working properly and turnover rates are within regulations.
- ✓ Educate swimmers on not healthy swimming- Shower before swimming, not swimming when sick, proper swim diapers, etc..

## Fecal Matter Response

Fecal Matter is the most common way to spread Recreational Water Illness. Here are the steps to follow if this happens at your facility.

### Formed Fecal Matter

1. Close the facility that is on the filtration system where the fecal incident occurred.
2. Remove as much fecal matter as possible. Use a net or bucket.
3. Raise the free chlorine concentration to 2ppm chlorine.
4. Maintain 2ppm chlorine and 7.5pH for 30 mins.
5. Confirm that the filtration system is working properly and turnover is being met.
6. After 30mins open pool

### Diarrhea- Liquid Fecal Matter

1. Close the facility that is on the filtration system where the fecal incident occurred.
2. Remove as much fecal matter as possible- vacuuming is not recommended.
3. Raise the free chlorine concentration to the following:
  - 20ppm for 28 hours or
  - 30ppm for 18 hours or
  - 40ppm for 8.5 hours
4. Confirm that the filtration system is working properly and turnover is being met.
5. Backwash filter
6. Open the pool once chlorine levels have reached the normal range.

### Tips:

\*Always use personal protective equipment when dealing with Fecal incidents.

\*Clean any equipment that comes in contact with Fecal Matter with proper disinfection- Nets, handrails, buckets, etc..

\*Spa/Hot tubs/Kiddie pools are small bodies of water, it might be more effective to drain, clean and refill.

\*If you have multiple pools on the same filtration system, all pools need to be treated and closed.

For more information: [www.cdc.gov/healthyswimming](http://www.cdc.gov/healthyswimming)

\*\*\*Guidance based on publicly listed industry standards and recommendations. VivoAquatics recommends you refer to local, regional, and federal guidelines to check your specific requirements and standards.