# Contaminated Flood Water

## Why be concerned about standing flood water?

Flooding can occur as a result of heavy rain, a storm surge, a broken water main, or sea-level rise, which periodically causes water to seep up through storm drains or spill over sea walls. Water that has not drained away or evaporated after a day or two is standing water. To be safe, one should consider it contaminated. Contaminates can be 1) Toxic chemicals like oils or gas from cars, pesticides or fertilizer from lawns or garages, or industrial chemicals from surrounding businesses. Substances like Benzene, Xylenes and Toleune are toxic. 2) Raw sewage that leeches from nearby septic systems or back flow from sewer lift-stations. 3) Bacteria from floating garbage, dead animals or fish, and items in storm drains.

#### How does climate change impact flooding?

With warmer land and water temperatures, South Florida can expect to more frequent intense rain events, resulting in inland flooding, and wetter, stronger tropical storms with greater storm surge, and increasing coastal flooding risk.

Sea-level rise will gradually increase the frequency of 'sunny-day' flooding of coastal areas, and cause higher storm surges during coastal storms. It will decrease the effectiveness of current storm water infrastructure to handle run-off. Together, these impacts mean more frequent and potentially more severe floods.



# **Health Impacts**

Wheezing/Coughing Nose/Throat Irritation Skin Irritations Wound Infections Headaches Legionnaires Ibrio vulnificus Leptospirosis

# Who is at high risk?

All residents in flood-prone areas, but specifically young children, pregnant women, the elderly, and people with compromised immune systems. Diabetics with foot wounds.

**What residents need to know.** Avoid contact with floodwater, water in retention ponds or even shallow puddles along roads and property. Standing flood water may appear clean but be contaminated. ((Picture 4)

- Do not let children play in puddles, or water retention areas.
- Murky flood water conceal sunken objects and be deceptively deep.
- Use water proof boots, gloves and a mask when cleaning or walking through it.
- Avoid inhaling chemicals that may evaporate from flood waters. Call a remediation company for cleaning if chemicals are a concern .
- Disinfect all hard cleanable surfaces with a solution of 1 ½ cups of bleach to 1 gallon of water, and throw out any items that can not be properly disinfected and dried.
- If air condition or heating systems are impacted by flood, have them professionally serviced.
- Throw out ALL food that was in contact with flood water, less canned items in good condition. Disinfect the cans before opening

### Key Website

http://www.cdc.gov/healthywater/emergency/extreme-weather/floods-

standingwater.html