Swimming with CVCs and G Tubes
yeah or nay?

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SO, HOW CLEAN IS THAT WATER.....
Recreational Water-associated Outbreaks

Centers for Disease Control and Prevention

– Reported a total of 134 recreational water-associated outbreaks from 38 states and Puerto Rico in a two-year period

– A total of 116 (86.6%) of the outbreaks were associated with treated recreational water (e.g., swimming pools)
Recreational Water Illnesses (RWIs) are caused by pathogens transmitted by ingesting, inhaling aerosols from, or having contact with contaminated water in swimming pools and other recreational water venues.
RWIs

• wide variety of infections
  - gastrointestinal, skin, ear, respiratory, eye, neurologic, and wound infections
  - most commonly reported RWI is diarrhea
    - Common organisms: Cryptosporidium, Giardia, Shigella, norovirus and E. coli O157:H7

• Crypto has become the leading cause of swimming pool-related outbreaks of diarrheal illness
  - 2004 - 2008, reported Crypto cases ↑ > 200% (from 3,411 cases in 2004 to 10,500 cases in 2008)
  - Can stay alive for days even in well-maintained pools
CVL Infections & Recreational Water Exposure: The Evidence

Robbins (1999)

– Descriptive study (self reported, parental questionnaire)

– 91 pediatric oncology patients (Children’s Hospital @ Strong)
  • 49 swimmers – 34 infections
  • 46 non swimmers – 13 infections

– No significant difference in the rate of infection per catheter month; accounted for duration of catheter not on duration of exposure to recreational water
CVL Infections & Recreational Water Exposure: The Evidence

Smith (2002)

• Retrospective case controlled study
• Pediatric oncology patients (Fresno Children’s)
• Population
  • 25 cases with CRBSI
  • 25 cases with CVCs
• No difference
• However...
  • Statistically significant increase in nonendogenous, gram negative infections in summer (May-October)
• Summertime recreational water exposure high in both groups
Swimming Pools
Does Chlorine Do the Trick?

• Most germs are killed by chloride (but not Crypto)
  – Crypto can remain alive up to 10 days in a well maintained chlorinated pool

• Must keep chlorine at recommended levels is essential to maintain a healthy pool
  - 2010 study: 1 in 8 public pool inspections resulted in pools being closed immediately due to serious code violations such as improper chlorine levels
Testing the Waters 2013
A Guide to Water Quality at Vacation Beaches

Guide to Finding a Clean Beach

How to Find Out if a Beach is Tested for Pollution—and What Authorities Do If They Find It.

Wondering how clean the water is at your favorite vacation beach? Finding an answer can be tricky. There is no national protocol for protecting the public from unsafe swimming water, so beach testing and closing/health advisory practices vary by beach and state by state. Some localities regularly test the water quality at their beaches, while others do not. Even when states and localities perform tests, they don't always notify the public or close beaches when bacteria levels in the water exceed health standards.

Finding Help Online

Here's how to check the safety of your favorite beach before heading out for a swim:

Learn More About Your State:

Testing the Waters
- Overview/Map
- Executive Summary
- Plan of Action: How to Clean Up America's Beaches
- Ratings of Popular Beaches
- Swimming in the Great Lakes
Swimming and other water-related activities are excellent ways to get the physical activity and health benefits needed for a healthy life. Americans swim hundreds of millions of times in pools, oceans, lakes, rivers, and hot tubs/spas each year and most people have a safe and healthy time enjoying the water. However, it is important to be aware of ways to prevent recreational water illnesses (RWIs), sunburn, and drowning that can occur. CDC’s Healthy Swimming Program and website, launched in 2001, provides information for the public, public health and medical professionals, and aquatics staff so everyone can maximize the health benefits of swimming while minimizing the risk of illness and injury.
Beaches are a place to play, watch wildlife, fish, and swim. Since beaches give us so much, we have to protect them from a variety of potential problems. EPA can help you plan a safe trip to the beach, learn about issues that affect beaches, and understand how we protect beaches.

- EPA’s Annual Beach Report: 2012 Swimming Season (June 2013)
- EPA’s Marine Sanitary Survey (May 2012)
- National List of Beaches – including interactive 2011 National List of Beaches (July 2012)
Florida Healthy Beaches Program

Click on Map Point or Name for Locations
Fecal Coliform

• Determines water quality in fresh, brackish and marine water environments

• Florida Healthy Beaches Program Categories:
  – Good = 0-199 fecal coliform per 100 milliliters of marine water
  – Moderate = 200-399 fecal coliform per 100 milliliters of marine water
  – Poor = 400 or greater fecal coliform per 100 milliliters of marine water
Florida Healthy Beaches Program: targeted organism categories

• Good = 0-35 Enterococci per 100 milliliters of marine water

• Moderate = 36-104 Enterococci per 100 milliliters of marine water

• Poor = 105 or greater Enterococci per 100 milliliters of marine water
SWIMMING WITH A CVL.......
Email Survey of Pedi HPEN Programs (n = 16/27 program responded)

1) Do you allow your patients with central venous catheters to go swimming? If yes, what bodies of water are allowed: ocean, lake, pool, etc.?

2) Are your patients required to use dressings/coverings? If yes, which product(s)?

3) Are there any other rules that the patients must follow?
Results

- 3/16 (19%) only allowed their patients with un-accessed ports that were well healed to go swimming
- 5/16 (31 %) allowed patients to go swimming with un-accessed ports or tunneled catheters (Hickman®, Broviac®)
- 2/16 (12.5%) allowed patients to go swimming with cuffed peripherally inserted central catheters (i.e., PICCs)
- 1/16 (6 %) allowed swimming without restrictions
- 2/16 (12.5 %) allowed minimal swimming but did not specify a restriction on the type of lines
- 3/16 (19%) did not allow any swimming of any sort
- 1/16 (6%) did not allow infants to go in the water but did allow older patients to swim
- 1/16(6%) had not had this question/situation come up.
For Programs that Allowed Swimming...

- 2/16 (12.5%) allowed any body of water
- 2/16 (12.5%) allowed oceans or pools
- 1/16 (6%) allowed oceans, pools, and private hot tubs
- 6/16 (38%) only allowed pools
- 1/16 (6%) did not specify

What others are doing......
http://oley.org/Swimming.html
If you allowed swimming…

• Dressing or line covers varied among the programs
  • no consistency in the products recommended
  • Tegaderm® and AquaGuard® were both mentioned

• All programs that allowed their patients to go swimming recommended cleaning the site and changing the dressing immediately after swimming
PROTECTING YOUR LINE....
Press and Seal
AquaGuard
Dry Pro
Dry Pro™ Waterproof Ostomy Protector
AnchorDry
Drysuit
Swimming with G Tubes
PEGS

• At least wait 4-6 weeks after placement (when site it healed)
• Make sure cap and/or clamp closed
• Make sure the PEG tube is tucked into bathing suit (wear T-shirt, 1 piece suit)
  – Prevents pulling, getting caught
  – Securely tape to abdomen with waterproof tape
Protecting Yourself and Others

Don't swim while ill with diarrhea

– For patients with cryptosporidiosis, don't swim for an additional 2 weeks after diarrhea has resolved
  • Cryptosporidium continues to be shed after cessation of diarrhea
  • potential for intermittent diarrhea might cause infected people to think symptoms have resolved,
  • increased transmission potential in chlorinated recreational water venues because of the parasite's high chlorine tolerance

• Don't swallow the water. Pathogens that cause diarrheal illness can be transmitted when swimmers swallow contaminated water. We don't drink the water in our bath tubs; why would we drink the water we swim in?

• Keep ears as dry as possible and dry ears thoroughly after swimming. CDC, the American Academy of Otolaryngology, and the American Academy of Pediatrics have recently released updated recommendations to prevent acute otitis externa. Using a bathing cap, ear plugs, or custom-fitted swim molds when swimming can help keep water out of the ears. Pulling the earlobe in different directions while the ear is faced down can help drain water out. If your patient has frequent episodes of acute otitis externa, consider prescribing prophylactic alcohol-based ear drops or a 1:1 mixture of rubbing alcohol and white vinegar. Drops should not be used by persons with tympanostomy tubes or ear tubes, damaged ear drums, outer ear infection, or ear drainage.

• Don't swim when you have open wounds. Open wounds can be sites of entry for pathogens, so people with open wounds should refrain from swimming until the wound is healed. Another option is to wear a waterproof occlusive bandage to cover the wound while swimming. Although swimming with open wounds represents a risk for the person with the wound or sore, CDC is not aware of data indicating that this practice puts the health of other swimmers at risk.
Some Common Sense Guidelines

• Don't swim when you have open wounds
• Don't swallow the water
• Keep ears as dry as possible and dry ears thoroughly after swimming
  – Use a bathing cap, ear plugs, or custom-fitted swim molds
  – Ask about prophylactic alcohol-based ear drops or a 1:1 mixture of rubbing alcohol and white vinegar
Thank You!

Well I love that dirty water... Boston you're my home. 😊

DIRTY WATER

THE STANDELLS