

## Study: More bacteria contracted from sand than surf

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Theresa Coppock and her son Jimmy, 4, of Delaware Co., Pa., play in the sand Monday along the waterline at Sixth Avenue in North Wildwood. A study released this month suggests beachgoers come in contact with higher levels of harmful bacteria when they dig in the sand than when they just go swimming.

Photo by: Dale Gerhard

Beachgoers might be more likely to contract a stomach bug from building sandcastles than swimming in the surf, according to a study published this month.

The study in the American Journal of Epidemiology surveyed beachgoers and found that people who buried themselves in the sand or built sandcastles were more likely to expose themselves to harmful bacteria than those who went swimming on the same beaches.

"It's been known for some time there was an association between water quality and swimming. The big question was what, if any, association is there between sand contact and health?" study author Chris Heaney said.

The study likely will not win the appreciation of America's tourism officials. Heaney said his intention was not to kick sand at beloved pastimes: "The results didn't change my attitude about the beach. I've never shied away from digging in the sand or swimming or snorkeling," he said. "It just helps remind you to use proper hygiene and remember to wash your hands before eating."

County health departments across New Jersey regularly monitor water quality to protect bathers from bacteria caused by stormwater runoff, wildlife and dog droppings, or human waste. But Heaney said his findings lead him to wonder whether testing the sand rather than the water might be a better barometer for bacteria.

Researchers with the University of North Carolina at Chapel Hill and the Environmental Protection Agency surveyed 27,000 people who visited beaches in Florida, Rhode Island and the Great Lakes.

The researchers followed up with these survey subjects 10 to 12 days later to see if they had experienced any problems such as diarrhea, rashes, eye irritation, earaches or infected cuts.

People who reported digging on the beach had more ailments than those who went swimming, Heaney said.

Only a tiny percentage of people reported health problems of any kind as the result of their beach experience, Heaney said.

Beach closures caused by high bacteria counts are so rare in New Jersey nowadays that they become front-page news when they do occur.

Beachgoers on Stone Harbor's picturesque strands on Monday were a little amused by the idea of potentially harmful microbes lurking in the cool, white sand between their toes.

There was nary a bottle of hand sanitizer to be found on this stretch of carefree beach.

"Looks clean to me," Bob Lutz of Harrisburg, Pa., said while lounging in a beach chair on the south end of the island. "The water looks good, too."

"We never considered it," Jessica O'Dell of Old Saybrook, Conn., said while playing in the sand with her toddler. "It seems like the water here is cleaner than in Connecticut. We just rinse off in the water and have our snack."

But Lori Diminick of Harrisburg, Pa., who celebrates her 48th birthday today in Stone Harbor, said the study makes sense. Her doctor informed her about bacteria in the sand when he treated a cut on her hand.

"He warned me to make sure I kept it wrapped when I went to the beach," she said. "He said there were more contaminants in the sand."

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