

How to Sanitize Ball Pit Balls to Help Prevent the Spread of Infection

*By Ralph Morris, MD, MPH
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Children love to play in ball pits whether for fun or as part of a physical therapy. When I see them gleefully navigating those tubs of colorful spheres, it occurs to me they are engaging in a form of “dry swimming.” In place of water, they “swim” through a medium of lightweight plastic balls. Unlike swimming pool water, however, there is no standard method to treat ball pit balls to help prevent the spread of infectious illness. Based on [recent research](#) that identified a host of pathogens in pediatric therapy ball pits, I suggest the time to evaluate the need for such guidance is now.



Potential Risks from Ball Pits

Researchers from North Georgia State University identified 31 bacterial species and one yeast species in their investigation of six ball pits in pediatric physical therapy clinics in the state of Georgia. Ball pit exercises help provide stimulation to children with sensory and motor impairments, according to the researchers. The researchers randomly sampled nine to 15 balls from different depths of each of the six ball pits. Pathogens identified on the balls, they reported, can cause pink eye, urinary tract infections, bloodstream infections, and heart inflammation, among other conditions. In an [interview with HealthDay](#), senior study author Professor D. Bialonska warned, "Be aware of this if you take your child to a physical therapy clinic, especially if the child has a compromised immune system." I agree! You wouldn't encourage your immunocompromised child to swim in a pool devoid of chlorine disinfectant, so why would you condone therapy in a pathogen-ridden ball pit?

Opinions may vary as to how important it is to sanitize ball pit balls in fast food chain restaurants, visited mostly by children with normal immune systems. Professor Bialonska [said](#) being in ball pits could help healthy children build those immune systems. Nevertheless, she stated that children should [wash their hands](#) after exiting the ball pit, especially if they are going to eat after playing. And I'll add that any open cuts should be protected with bandages before kids jump into ball pits.

Sanitizing Ball Pit Balls

As the researchers noted, the degree of infection among the six pediatric therapy ball pits studied varied greatly, but unanswered questions remain: Are some being sanitized while others are not? Which sanitizing methods, if any, are being used?

Some possible ball sanitizing methods that were cited by the researchers and online commenters were:

- Washing balls in a commercial ball washer (yes, these exist!)
- Cleaning and sanitizing balls manually using a bleach and water solution
- Washing balls in a clothes washer (assuming no small holes or cracks in the balls)
- Soaking balls in a tub of chlorinated water (assuming no small holes or cracks in the balls)
- Using disinfectant wipes on individual balls (especially those that have holes or cracks that could allow water inside)

If we can take a page from the U.S. Environmental Protection Agency's [recommendations](#) for sanitizing hard surfaces, ball pit balls without holes or cracks could be treated in a chlorine bleach solution of 200 parts per million. For every gallon of solution needed, one tablespoon of unscented, regular (approximately 6%) chlorine bleach is needed. The balls should be washed with soapy water first and rinsed with clear water before sanitizing with the bleach solution. Perhaps the washing, rinsing and sanitizing could be done in a large basin or tub. Air dry, and back in the pit they go when they are dry! I'm all for ball pits and their smart use in pediatric therapy. Let's try to prevent the spread of infection and any unintended consequences for children of compromised immunity.

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