

What's the best way to wash athletic uniforms and laundry?

Q & A with Steve Leib, Sports Laundry Systems

Having spent 30 years as a teacher and coach at both the high school and collegiate levels, Steve Leib understands the challenges facing athletic facilities. As a college football coach he has witnessed the struggles of processing athletic laundry and the problems associated with bacterial infections among athletes. As sales director for Sports Laundry Systems, Leib shares his knowledge of uniform and athletic laundry care and urges athletic facilities to select laundry systems that will properly clean and disinfect.

Q. Athletic laundry is just like any other laundry isn't it? Why does it take special care?

A. This question requires a two-part response. First, soiled athletic laundry generally accumulates in the locker room by athletes who are often subjected to cuts and scrapes, among other injuries. Athletic locker rooms and facilities are known to be good places for bacteria to grow or collect. So, infection can spread easily from athlete to athlete, or from towel to athlete, for example. It's fairly common for athletes to become infected with bacteria, such as staph, or worse. If that bacteria contaminates a towel or jersey, say from an athlete's bloody or infected knee, then others can also become infected from that towel or jersey. They can also become infected from direct skin-to-skin contact. MRSA, which is a staph infection that is resistant to antibiotics, is on the rise in locker room environments. It's very contagious and more difficult to treat than most infections. According to the Uni-

versity of Chicago MRSA Research Center, people with MRSA infections stay infected for just under 10 days. An athlete with MRSA can't practice or participate in games during that time.

So, first, athletic laundry is not the same as most other laundry. It's laden with sweat, body fluids and sometimes blood. It can be contaminated with bacteria that can spread to others if not handled properly. So it must be cleaned and disinfected quickly. And it shouldn't lay around in piles waiting to be washed.

Second, today's athletic uniforms are comprised of fabrics that don't do well if bleached or over-dried at high temperatures through traditional means of disinfection. The nature of the fabrics demand special care so they look good and last a long time. This also makes athletic items different from typical laundry.

Q. So, athletic laundry should be washed and dried quickly so it doesn't spread infection, right?

A. Right. But, athletic laundry also requires specialized washing. Athletic laundry items must be disinfected in the wash. This disinfection should kill any bacteria and viruses contaminating the laundry. By disinfecting the laundry, you are killing bacteria that spread infection. You also kill the bacteria that cause fabrics to smell from body odor, for example.

Q. How do you know if you are disinfecting athletic laundry?

A. Most laundry systems don't disinfect laundry. So, it's important to ask the manufacturer of the laundry

system for evidence that disinfection occurs during the wash process. If they don't have that evidence—laboratory testing that proves disinfection—look for a laundry solution that does.

Q. What are manufacturers of today's athletic uniforms recommending when it comes to cleaning them?

A. Athletic uniforms require special care. Nike and Under Armour®, for example, agree on most of the following when washing uniforms:

- Turn jerseys inside out to wash and dry.
- Presoak heavily soiled garments in cold water with a protein release agent.
- Do not use bleach. This fades colors and weakens materials. Never bleach any item that contains spandex or that has tackle twill, embroidery, or silk-screen numbers, letters or emblems.
- Do not wash in hot water.
- Use mild detergents with pH under 10.
- Launder garments immediately after wearing.
- Wash colors and whites separately.
- Do not use fabric softeners. Fabric softeners deteriorate garments with spandex, and they also restrict the effectiveness of Dri-Fit technology.
- Do not dry clean or press.
- Wash and rinse items in cold water with mild detergent. Remove promptly after wash cycle to avoid color migration.
- Hang or machine dry on the lowest setting.



Q. So, without hot water, softeners and bleach, per manufacturer recommendations, how do you get uniforms clean and disinfected?

A. You need a laundry system that combines washer programmability with ozone injection. Here's what I mean.

A Highly Programmable Washer

First, you must have a highly programmable washer that can provide the proper pre-treat soak, mechanical action, water temperatures, cycle time and chemistry. A highly programmable washer allows users to program multiple variables to meet specific manufacturer recommendations. So, you can program water temperatures, water levels, mechanical action, extract speeds and detergent (chemical) injection to exactly meet fabric washing requirements. Once the washer is programmed, it is a piece of cake to operate. Operators just push a program number for load type—such as uniform jerseys—and press start. For each item (towels, uniforms, loops, etc.) there may be a different wash program.

Ozone Injection

The second requirement is ozone. Through the use of ozone in the wash, you can properly clean uniforms without bleach, hot water and softeners. This requires a programmable ozone system that works in tandem with the programmable washer to clean, disinfect and soften/neutralize the laundry.

Q. Tell me how ozone works in the wash without hot water, bleach and softeners.

A. Ozone gas attaches to and breaks down organic materials like soils, bacteria, molds and greases. Once broken down, these materials are easily removed from fabric by detergent in the wash cycle. Ozone works best in cold water, and since ozone leaves only oxygen behind,

it is also environmentally friendly. Ozone is a powerful and natural biocide—destroying bacteria, deactivating viruses and controlling odors. Ozone eliminates the need for bleach and softeners. In the end, ozone allows athletic facilities to clean athletic laundry using fewer chemicals and mostly cold water. At the same time, ozone released into the wash in the proper disbursements successfully disinfects.

Remember, however, that not all ozone systems are well controlled to ensure laundry is disinfected. Ozone should be introduced into the wash process according to size and soil level of the load. If too much ozone is in the wash, it can break down fabrics; if too little is in the wash, it doesn't disinfect. A validated ozone system is critical. A validated ozone system hits and maintains targeted levels of ozone in parts per million. This ensures a proper clean and disinfection.

Q. Do you buy the washing machines and ozone systems separately?

A. It's best to purchase a system—one that brings together washers, ozone injection and dryers. Remember to look for a sports laundry system that is proven to disinfect and offers validated ozone.

Q. So, along with cleaning uniforms, which are usually made up of fabrics that require washing in cold water, without bleach and softeners, you can also wash all other athletic laundry using these laundry systems?

A. Yes. There are lots of items with different soil levels. A proper sports laundry system will properly clean and disinfect loops, a variety of football pads, towels, chin straps, belts, gloves, sweats, shorts, shirts, and more ... The washers in the system are programmed specifically for each item. In other words, towels require a different mix of water

temperature, mechanical action, ozone and chemistry. The same holds true for the other items, like sweats and practice shorts. In combination with the ozone injection, the system ensures disinfection just like with the uniforms.

Q. Why is it not a good idea to wash athletic uniforms and laundry in home-style toploads and frontloads?

A. First, they aren't equipped to offer the programmability needed to properly clean these specialized fabrics. Second, they don't inject ozone, so there is no disinfection. Third, they are just not tough enough to handle these loads day in and day out.

Q. Are there other advantages to installing a sports laundry solution that offers everything you're talking about?

A. Yes. The athletic facility will help fight the spread of infection among athletes; better protect their recruited athletes; properly wash expensive uniforms and extend uniform life; use less hot water for natural gas savings; improve laundry productivity; and cut chemical usage and costs.

To discover more about athletic laundry solutions, visit www.sportslaundrysolutions.com, or contact Leib at 920-230-8550.