

How Cotton Is Used in Healthcare Applications

The use of natural fibers in [healthcare applications](#) dates all the way back to ancient times. In fact, one of the earliest documented examples of natural fibers (wood) being used in a healthcare capacity was for wooden dentures. Cotton history in healthcare is not far behind, as it has long been used in the healthcare arena due to its absorbency, softness, purity, and hypoallergenic properties. Cotton can also be sterilized by all three major sterilization methods: steam, ethylene oxide, and gamma radiation.

Today we'll briefly discuss the four major areas of healthcare products: non-implantable, implantable, extracorporeal, and hygienic. Cotton has been or is being used in all four.

1. Non-Implantable Products

Non-implantable products are applied externally. This group includes dressings, bandages, and padding. This also extends to protective clothing such as patient and medical personnel gowns, drapes, gloves, facemasks, [dental rolls](#), and pellets. Cotton can be used in all of these products as either 100% cotton, cotton blended with other fibers, or in fabric composites.

2. Implantable Products

Implantable products are obviously used inside the body. Cotton is a key component in many brands of tampons, and therefore falls into this category. This is once again a testament to the level of trust cotton provides, and further proof of why it's consumer-preferred not just for healthcare, but [a variety of applications](#).

3. Extracorporeal Products

Extracorporeal healthcare products are used in procedures that take place outside of the body. One example of how cotton is used in this capacity is as a [debridement sponge](#). These sponges can be used to clean or debride an organ outside the body cavity, which means only the purest and safest fiber should be used.

4. Hygiene Products

Hygiene products are widely used in many healthcare applications, such as baby and adult diapers, incontinence products, feminine hygiene pads, and sanitizing and antiseptic wipes. Cotton can be utilized in all these products as well. It may be as simple as a cotton ball with alcohol to clean your arm before an injection, or as complex as being a component in a modern diaper structure.

The Most Trustworthy Fiber

A history of safety as a trusted fiber for absorbent—and now nonabsorbent—applications, assures cotton will be a fiber of choice for many centuries to come. In fact, the introduction of Barnhardt's new [HyDri™ cotton](#) provides a new alternative to healthcare applications; it's a hydrophobic fiber that could potentially be used in non-stick applications. To receive product innovation updates from Barnhardt, sign up on our [Customer Service page](#).