



healthcare textiles & laundry

By David Potack

Striving for Continuous Improvement

America's advanced capability to control infection contributes to our nation's standard of living. We assert that we prevent healthcare-associated infections (HAIs) better than the rest of the world and conclude that maintaining such performance requires the adoption of American hygiene standards based purely on U.S. research. But this does not consider risk minimization practices superior to our own developed elsewhere, with healthcare textile (HCT) hygiene as an example.

Hospital linen is insignificant to HAIs and probably always will be. No matter how small an infection risk may be, however, it's critical to minimize it. For more than 30 years, the German Certification Association for Professional Textile Services (CAPTS) has established thresholds for HCT cleanliness. Since the 1986 launch of CAPTS' RAL-GZ 992/2 certification in Germany, the designation has been earned by laundries in 15 other European countries (Eastern and Western), China, Japan, Saudi Arabia and the United Arab Emirates.

TRSA's inception of Hygienically Clean Healthcare certification introduced CAPTS cleanliness standards to North America in 2012 as an adjunct to robust laundry inspection. Some 150 laundries in the United States, Canada and Mexico have either been certified or have applied for Hygienically Clean. It has become the American microbiological content standard for HCTs.

Europeans have long been ahead of North America in adopting laundry technologies and measures. Tunnel washing was invented in Germany in 1965; with its superior water and energy efficiency and requiring less manual material handling than standalone washers, it was embraced in Europe first.

Over the years, visits by North American TRSA members to our overseas counterparts have been invaluable. Now when we tour their laundries, we still see technical advances, but we use essentially the same types of equipment and supplies. This striking similarity validates the adaptation of CAPTS thresholds here.

Calls for U.S. research on HCT cleanliness thresholds overlook the Hygienically Clean certification track record. Certified laundry facilities have tested over 5,500 textile samples using the same or similar protocols and microbiological levels that have been examined, researched, tested and discussed with our global partners for many years.

While sentiment is expressed that an industry benchmark still has not been established, the Hygienically Clean thresholds—on total microbial content (20 colony forming units per square decimeter of fabric in the RODAC plate test), yeast and mold (same) and absence of specified bacteria—have thrived overseas for decades and been accepted by North American healthcare facilities for nearly a decade.

Suggesting other U.S. thresholds are needed could backfire and prompt government rulemaking rather than the stringent self-regulation Hygienically Clean provides. Today in Germany, the Ministry of Health's Robert Koch-Institute (RKI) sets basic rules for healthcare products and procedures to reduce infection risk in hospitals, including limit values for HCT processing.

Microbiological requirements are enforced for hospital linen, hospital laundries, laundry processes and outsourcing to private laundries. Building requirements and recommended procedures and performances are given or referenced.

On a continent-wide level, the European Union standard (EN 14065) on risk analysis and bio-contamination control encourages self-regulation. It fosters a standardized quality management system for RABC for laundries in sensitive sectors including healthcare, food processing, pharmaceutical and medical devices, but isn't overly prescriptive.


Used by most major European healthcare laundry firms, EN 14065 is voluntary, but it guides regulatory, accreditation and certification authorities.

Laundry reflects the positive influence on the U.S. of the worldwide development of international health technology. According to *Medical Product Outsourcing* magazine 2019 listing of the top global medical device companies, nine of the Top 20 are based outside the United States: seven in Europe and two in Japan.

Europe's hygiene performance could be considered more successful than ours. Every other year, the World Economic Forum publishes a report that provides a valuable tool for policymakers, companies and complementary sectors to understand and anticipate emerging trends and risks in global travel and tourism.

A competitiveness index rates countries on their enabling environment, policy and enabling conditions, infrastructure and natural and cultural resources.

Health and hygiene are pillars in the rating of a nation's enabling environment. Among the 140 countries, the U.S. is 51st in this category and Canada is 52nd. All European nations (except six) and nine non-European rank higher. Austria and Germany are tied for first. Their rating is 20 percent stronger than that of the U.S. Argentina (14), Japan (16), and the Republic of Korea (17) all are 10 percent better.

Continuous improvement is our goal. With our worldwide counterparts, we anticipate further reducing the already infinitesimal risk of spreading pathogens through HCTs. 

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