

Minimizing Risk with Consumer Products

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Now more than ever, manufacturers of consumer products place a premium on product safety. As society's tolerance for risk continues to decrease, and both the legal and regulatory landscapes grow more challenging, consumer product safety has become more critical than ever before. When coupled with rapidly evolving technology and the constant push to innovate in order to stay relevant, consumer product manufacturers are unfortunately faced with a recipe for increased corporate risk. Furthermore, the rapid spread of any product safety issue on social media has proven to have a major impact on a company's brand reputation. A sterling legacy of safety can be crippled in just hours. Manufacturers are increasing their efforts to mitigate risk to ensure the long-term viability of their products and their brand.

First and foremost, manufacturers need a deep understanding of the evolving regulatory requirements of the markets in which they operate. Different countries use different methodologies to assess product risk and have different views on product safety that must be considered. For example, in the United States, the failure to report a potential safety issue in a timely fashion can result in major financial exposure from escalating civil penalties.

Testing consumer products to existing mandatory and voluntary safety standards is certainly important; however, in some cases, corporate risk can be further mitigated by considering product/model specific testing, augmenting the general safety standards that can apply to categories of consumer products. In some cases, companies facing consumer product recalls have test reports in their files stamped "PASS," yet they still have a safety issue. To further minimize risk, some consumer product companies use risk assessment methodologies on the front end of product development and perform application and product-specific design qualification testing to explore potentially unique failure modes and scenarios.

Everyone has heard about the importance of paying attention to the small details, but it's paying attention to the right details that can make the difference in establishing long-term product safety. An appropriate technical team carefully considers all relevant aspects of engineering, human factors, and health sciences that apply to the specific consumer product being designed. Their work can help a company develop appropriate testing and analysis that may go above and beyond standard certification tests. This approach requires proactive planning and high-level thinking.

Even companies that take a deliberate approach to product safety during the design phase can still be at risk for a consumer product recall. Companies in this situation must focus on understanding the underlying root cause of the reported problem. This understanding will enable them to determine the potentially affected population and help avoid having to later expand the scope of the product recall. A company cannot control, or even contain, what it doesn't understand.

Prudent manufacturers of consumer products assemble the right team of legal, regulatory, and technical stakeholders throughout the product life cycle to both

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anticipate and mitigate safety risks. Many also engage independent partners to supplement in-house expertise and offer critical, unbiased perspectives. This fresh set of eyes can help avoid the potential for “my baby syndrome” and identify possible safety risks that often require a multi-disciplinary view.

With 90+ technical disciplines of Ph.D.-level talent and decades of experience in the consumer product sector, Exponent routinely helps address these complex questions and solves safety challenges that can sometimes fall outside of a manufacturer’s core capabilities. Exponent’s globally recognized team of engineers and scientists can provide the technical expertise and associated regulatory support needed to help minimize safety risks across the entire consumer product life cycle.

Jason L. Hertzberg, Ph.D., P.E., Corporate Vice President & Principal Engineer, will present during Plenary Session # 4: Interactive Product Safety Crisis Simulation at the ICPHSO International Symposium. For more information [click here](#).



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