

## Gene Rider

Principal | Mechanical Engineering  
420 Lexington Avenue, Suite 1740 | New York, NY 10170  
(630) 258-0522 tel | grider@exponent.com

### Professional Profile

Mr. Rider has 30 years of experience focused on the design, development, manufacturing, and qualification of consumer goods. He has devoted his life to provide risk assessments, design safety assessment, foreseeable use assessments, essential safety standards, and safety training programs in support of his client's safety processes. His work was recently honored as an inaugural recipient of the U.S. Consumer Product Safety Commission (CPSC) Chairman's Commendation Circle Award, which recognizes people and groups who have demonstrated consistent and significant contributions to improving the safety of children's and other consumer products and to the prevention of deaths and injuries associated with using such products.

Working closely with the medical and scientific community to develop innovative technologies to assess risks posed by consumer products, he has achieved influential status as a leading force in injury prevention, with special focus on adolescent exposure. The technologies developed under his management have been shared with the U.S. CPSC and, even more importantly, have been applied to help consumer product companies effectively integrate safety into their product designs and business processes.

Mr. Rider was instrumental in the development, deployment and technical support of one of the most robust safety processes for children's articles. The safety process supported the design, manufacture, and distribution of over one thousand unique designs and one billion items annually. The products managed by the safety process resulted in exceptionally low injury rates as compared with the global toy industry. In 1989, to support company needs for fast turn-around testing, Mr. Rider directed the start-up of the first commercial testing laboratory in China which he managed as part of the global safety team for twenty five years.

His 2009 ground breaking publication "Framework Model of Product Risk Assessment" in The International Journal of Injury Control and Safety Promotion established a widely accepted framework for risk assessment used by global regulatory agencies and industry. Mr. Rider teaches risk assessment and product safety at the Saint Louis University Executive Advanced Safety Training Program.

Mr. Rider is an expert in the field of physical hazards, an area he and his colleagues researched for more than 25 years. He recently developed a number of training programs designed for his clients to alert their supply chain to product safety issues and to enlist the suppliers quality and business management to eliminate product design and manufacturing hazards from their product line. The web based safety training programs are designed for all categories of consumer goods including process foods and food packaging. In one case, the training program has been developed as a sitcom designed to gain the attention of product innovators, product designers, and merchants.

Mr. Rider provides safety process audits for retailers, importers, manufacturers, and distributors of

consumer goods. The audit process includes a review of the client's safety and business processes for compliance with the requirements of the US Consumer Product Safety Improvement Act, as well as, the Canadian Consumer Product Safety Act and the European General Product Safety Directive if products are distributed in those markets. Critical areas of investigation include: available process for assuring suppliers do not exert undue influence over test results and certifications; availability of product specifications, documented safety assessments; available production test plans that provide a high degree of assurance of compliance; available test and conformity assessment reports; documented remedial action and material change processes; issuance of general certificates or declarations of compliance; available customer feedback safety assessment process and available technical files.

Mr. Rider recently chaired the IEEE P-1789 subcommittee on the health effects of photo-flicker from LED lights. The subcommittee included academic, industry, and government researchers from North America and Europe. The four year effort resulted in the 2015 publication of IEEE P 1789 "IEEE Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers." Mr. Rider works with clients to assess the hazards of LED lighting and supports the research and implementation of technology to mitigate the health effects of existing and future LED lighting applications.

Mr. Rider and his colleagues supported the National Button Battery Task Force, affiliated with the American Academy of Pediatrics, the American Broncho-Esophagological Association, and the American Academy of Otolaryngology-Head and Neck Surgery, which was "A collaborative effort of representatives from relevant organizations in industry, medicine, public health and government to develop, coordinate and implement strategies to reduce the incidence of button battery injuries in children." The efforts of the National Button Battery Task Force resulted in the "UL Standard for Safety for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies", UL 4200A -2016.

Mr. Rider was selected by the American National Standards Institute (ANSI) to serve as a US representative on an ad hoc group of industry experts to revise ISO/IEC Guide 50, Safety aspects - Guidelines for child safety, published by the International Organization for Standardization (ISO) and the International Electro-technical Commission (IEC). The guidelines are used globally by architects and building designers to reduce the risk of injuries in their facilities.

Over the past 30 years, Mr. Rider has reviewed the product quality and safety management systems at hundreds of consumer goods factories in North America, Europe and Asia. As a result, Mr. Rider has first-hand knowledge of typical consumer goods manufacturing methods, equipment, work flow, quality/safety systems and product traceability. Robust testing of the products produced by these same factories provided Mr. Rider with detailed knowledge of manufacturing process variability and activities critical to producing compliant products. Mr. Rider is a frequent speaker at safety and medical conferences.

## Academic Credentials & Professional Honors

B.S., Fisheries Management, Utah State University, <p>

</p>, 1970

**U.S. Consumer Product Safety Commission Chairman's Commendation Circle Award** - Awarded at CPSC Headquarters, Dec. 2011. Chosen as an inaugural recipient of this award, which recognizes people and groups who have demonstrated consistent and significant contributions to improving the safety of children's and other consumer products and to the prevention of deaths and injuries associated with using such products.

**2008 Teamwork Award, McDonald's Regulatory Response Team** - Presented by McDonald's Supply Chain Management in recognition of Intertek's contribution to supporting McDonald's response to regulatory incidents.

**2007 McToy Safety Gold Standard Award** - Awarded to Intertek for its outstanding contribution to protecting McDonald's customers and its brand.

**Outstanding Contribution to Child Safety Award** - Awarded at McDonald's Annual Go-Away, Sept. 2003. This prize is awarded every year to labs and agencies that McDonald's Safety Committee determines as outstanding / excel in providing safety services to businesses worldwide.

**Seymour Cohen Award** - Awarded at the annual meeting of the American Broncho-Esophagological Association February 1999. This prize is awarded by the American Broncho-Esophagological Association for the best original research conducted by a resident, fellow or attending physician. "Prevention of Accidental Childhood Strangulation: Where is the Site of the Obstruction?" International Journal of Pediatric Otolaryngology Vol. 49 Supplement 1 October 1999. R. Stevens, MD, J. Lane, MD, Milkovich S, PhD, Stool D, Rider G, Stool S.

## Patents

EU Application #1560129: Knowledge Portal for Accessing, Analyzing, and Standardizing Data, Issued January 7, 2005 (Chen X, Huang E-A, Milkovich S, Rider E).

EU Application #1517225: Haptic Response System and Method of Use, Issued September 16, 2004 (Altkorn R, Chen X, Milkovich S, Owens J, Rider B, Rider E, Stool D).

US Patent Application #10/941,008: Haptic Response System and Method of Use, (Altkorn R, Chen X, Milkovich S, Owens J, Rider B, Rider E, Stool D).

US Patent 10/923,691: Knowledge Portal for Accessing, Analyzing, and Standardizing Data, Issued August 24, 2005 (Chen X, Huang E-A, Milkovich S, Rider E).

US Patent 6,957,961: Manikin Having a Bio-Simulating Material and a Method of Making Same, Issued 10/25/05 (Owens J, Milkovich S, Stool D).

US Patent 10/757,578: Knowledge Portal for Evaluating Product Attractiveness and Risk, Issued January 15, 2004 (Rider E, Milkovich S, Brown T, Chen X, Huang E-A).

US Patent 09/805,892: Pressure Distribution Image Analysis Process, Issued 12/30/03 (Rider C).

US Patent Application #60/255,430: Mechanical Lung, Filing Date December 15, 2000 (Doherty P, et al.).

US Patent Application #60/255,397: Bio Simulating Materials, Filing Date December 15, 2000 (Owens J, et al.).

PRC Patent #00 2 28770.6: TS-05 McDonald's Perpendicular Tension Tester, Issued November 14, 2001 (Fangjun W, et al.).

US Patent 09/413,253: Apparatus & Method for Assessing Burn Injury from Flammable Materials, Issued November 6, 2001 (Stool DK, et al.).

US Patent 09/408,171: Apparatus \* Method for Measuring Strangulation Effect, Issued June 6, 2001 (Rider ED, et al.).

US Patent 09/132,755: Method & Apparatus for Assessing Risks of Injury, Issued February 20, 2001 (Rider ED, et al.).

US Patent #09/182,628: Method & Apparatus for Measuring Pediatric Biomechanics, Issued May 23, 2000 (Milkovich S, et al.).

US Patent #09/095,148: Window Blink Assembly, Issued May 25, 1999 (Rider ED, et al.).

## Publications

Altkorn B, Rider G, Chen X, Stool D. Food-related choking.

Encyclopedia of Food Safety, Volume 3, 2014.

Rider G. The product safety system puzzle: Part 1: Selling Product Safety to Management. Product Safety & Recall Directory, 2012,

Rider G, Van Aken D, Van de Sman C, Mason J, Chen X. Framework model of product risk assessment. The International Journal of Injury Control and Safety Promotion 2009 June 16(2).

Rider G. Physical Hazards. In: Information Resources in Toxicology, Fourth Edition Chapter 42, 2009.

Milkovich S, Altkorn R, Chen X, Reilly JS, Stool D, Tao L, Rider G. Development of the small parts cylinder: lessons learned. The Laryngoscope 2008.

Altkorn R, Chen X, Milkovich S, Stool D, Rider G, Bailey CM, Haas A, Riding KH, Pransky SM, Reilly JS. Fatal and non-fatal food injuries among children (aged 0-14 years). International Journal of Pediatric Otolaryngology 2008.

Chen X, Beran M, Altkorn R, Milkovich S, Gruaz K, Rider G, Kanti A, Ochsenhirt J. Frequency of caregiver supervision of young children during play. International Journal for Injury Control and Safety Promotion 2007.

Beran M, Nielsen E, Altkorn R, Milkovich S, Rider G. Lifespan perspectives on the foreseeable use of consumer products. Ergonomics in Design 2007.

Chen X, Reilly JS, Milkovich S, Rider G. Pediatric coin ingestion injuries: Recommendations for prevention. The Laryngoscope, 2007.

Stool D, Reilly J, Bolders-Frazier J, Rider G. Assessment of the potential for airway obstruction by confectionary products. SENTAC Annual Meeting Proceedings, 2007.

Milkovich S, Altkorn R, Stool D, Rider G. Prevention of noise induced hearing loss in children. International Journal of Pediatric Otolaryngology 2007.

Milkovich S, Chen X, Tao L, Rider G. Effectiveness of the SPTC for injury prevention. International Journal of Pediatric Otolaryngology, 2007.

Milkovich S, Stool D, Owens J, Chen X, Beran M. Accidental childhood strangulation by human hair. International Journal of Pediatric Otolaryngology 2005 Dec; 69(12):1621-1628, December 2005. (viewable online)

Chan SCN, Chao HC, Tao L, Chen X, Stool D, Milkovich, SM, Rider G. Button cell batteries ingestion: A comparison of American and Taiwanese experience. 3rd Asian Regional Conference on Safe Communities Conference Proceedings, Section 2, pp. 117-120. October 2005.

Altkorn B, Milkovich S, Rider G. Light emitting diode safety and safety standards. Proceedings of the 2005 IEEE Symposium on Product Safety Engineering, October 2005.

Altkorn B, Milkovich S, and Rider G. Measurement of noise from toys. NoiseCon2005 Conference

Proceedings, October 2005.

Altkorn B, Milkovich S, Rider G. Measurement of noise from toys. *Journal of the Acoustical Society of America* 2005 Sept; 118(3 Part 2):1953.

Chen X, Milkovich S, Stool D, van As AB, Reilly JS, Rider G. Pediatric coin ingestion and aspiration. *International Journal of Pediatric Otolaryngology*, 2006, 70(2):325-329

Reilly J, Chen X, Milkovich S, Stool D, Rider G. Foreign body injury survey internet reporting tool. *International Journal of Pediatric Otolaryngology*, 2005, 69, 1149

Rider G (in conjunction with the editing staff of Bevan M, Meyer J.) *Physical Hazards*. Chapter of *The Encyclopedia of Toxicology*, 2nd Edition, Volume 3, pp. 424-436, June 2005.

Rider G. About risk management. Update Intertek ETL SEMKO, winter 2004.

Papadopoulos FC, Petridou E, Frangakis CE, Farmakakis T, Moller H, Rider G. Switching to the Euro: Still hard to swallow. *Archives of Disease in Childhood* 2004 April; 89(4):382-383.

Milkovich S, Rider G, Greaves D, Stool D, Chen X. Application of data for prevention of foreign body injury in children. *International Journal of Pediatric Otorhinolaryngology Supplement Advances in Pediatric Otorhinolaryngology*. Selected extended abstracts from the 8th International Congress of Pediatric Otorhinolaryngology 2003 Dec; 67: S179-S182. Edited by J.M. Graham and R.J. Ruben.

Van As AB, Du Toit N, Wallis L, Stool D, Chen X, Rode H. The South African experience with ingestion injury in children. *International Journal of Pediatric Otorhinolaryngology Supplement Advances in Pediatric Otorhinolaryngology*. Selected extended abstracts from the 8th International Congress of Pediatric Otorhinolaryngology. Edited by J.M. Graham and R.J. Ruben. Volume 67 Suppl. December 2003. pp. S175-S178.

Reilly BK, Stool D, Chen X, Rider G, Stool SE, Reilly JS. Foreign body injury in children in the Twentieth Century: A modern comparison to the Jackson Collection. *International Journal of Pediatric Otorhinolaryngology Supplement Advances in Pediatric Otorhinolaryngology*. Selected extended abstracts from the 8th International Congress of Pediatric Otorhinolaryngology. Edited by J.M. Graham and R.J. Ruben. Volume 67 Suppl. December 2003. pp. S171-S174.

Chan N, Milkovich S, Rider G, Greaves D, Stool D, Chen X. Cross-cultural application of data for prevention of foreign body injury and fatality in children. XVth Triennial Congress of the International Ergonomics Association. 2003.

Stool S, Stevens R, Milkovich S, Rider G, Stool D. Prevención de Accidentes en Otorrinolaringología, III Manual de Otorrinolaringología Pediátrica de la Interamerican Association of Pediatric Otorrinolaringology (IAPO) September 2003, pp 39 - 41.

Fox W, Shaffer T, Stool D, Milkovich S, Rider G, Chen X, Ryan R, Stool S. A computerized, robotic model for evaluation of infant strangulation. *Pediatric Research* 2003 May; 53(4): 341A.

Rider G, Stool D, Milkovich S. Development of a criteria to prevent tympanic membrane perforation caused by children's products. *International Journal for Injury Control and Safety Promotion* 2002; 9(3):169-173.

Rider B, Daily J, Bailey W, Milkovich S, Rider G. FEA modeling of burn injury in tissue quantifies hazard associated with consumer products. *Proceedings from the National Agency for Finite Element Methods and Standards (NAFEMS) World Congress*, April 2001.

Rider G, Milkovich S, Stool D, Wiseman T, Doran C, Chen X. New tool for risk analysis. ICPHSO Update, Winter, 2000.

Stevens R, Lane J, Milkovich S, Stool D, Rider G, Stool S. Prevention of accidental childhood strangulation. A clinical study. *Annals of Otology, Rhinology & Laryngology* 2000 Sept; 109(9).

Rider G, Milkovich S, Stool D, Wiseman T, Doran C, Chen X. Quantitative risk analysis. *International Journal for Injury Control and Safety Promotion*, July 2000.

Stevens R, Lane J, Milkovich S, Stool D, Rider G, Stool S. Prevention of accidental childhood strangulation: Where is the site of the obstruction? *International Journal of Pediatric Otolaryngology* 1999 October; 49(1).

Rider G. Designing safer products for children. *BENCHmark: Case Studies*, pp. 20-23, October 1999.

Rider G, Milkovich S, Xu T, Scandridge J, Stool D, Marrinan A. Strangulation hazards examined with research and FEA studies to aid in the design of safety children's products. *Algor Design World*, Third Quarter, pp. 6, 11, 13; 1999.

Rider G, Xu T, Stool D. FEA studies examine hazards to children. *Mechanical Engineering* 1999 Sept; pp. 22, 24.

Rider G, Xu T, Stool D. FEA helps eliminate accidental strangulation. *Machine Design* 1999 Aug; pp. 73-76.

Stool D, Brickley M, Milkovich S, Stool S. Safety research into the size and shape of soothers. Research Commissioned by Consumer Affairs Directorate, DTI, December 1998.

Stool D, Welling JR. Human factors project: Development of computer models of anatomy as an aid to risk management. *International Journal of Pediatric Otorhinolaryngology* 1998 May; 43(3):217-227.

Pratt L, Rider G. Keep out of reach of children. *KidScreen* 1997 Feb; p. 44.

Reilly JS, et al. Pediatric aerodigestive foreign body injuries: Complications related to timeliness of diagnosis. *The Laryngoscope* 1997 Jan; 107:17-20.

Reilly JS, Cook SP, Stool D, Rider G. Prevention and management of aerodigestive foreign body injuries in childhood. *Pediatric Clinics of North America* 1996 Dec; 43(6):1403-1411.

Rider G, Wilson CL. Small parts aspiration, ingestion, and choking in small children: Findings of the small parts research project. *Risk Analysis: An International Journal* 1996 June; 16(3):321-330.

Rimmel FL, Stool S, Reilly JS, Rider G, Wilson CL, Stool D. Characteristics of objects that cause choking in children. *Journal of the American Medical Association* 1995 Dec; 274(22):1763-1776.

Stool SE, MD, Manning SC. Foreign bodies of the pharynx and esophagus. *Pediatric Otolaryngology*, Vol. 2. 3rd ed. Philadelphia, W.B. Saunders Company, 1995.

## Project Experience

Mr. Rider started Rider Technologies in 2013 to serve the consumer goods industry. Rider Technologies offers consulting services, innovative technologies and proven processes which support consumer goods supply networks globally. Rider Tec's range of services was designed to help consumer goods manufacturers, importers and retailers increase profitability, reduce time to market and increase staff scalability.

Mr. Rider is the past President of Intertek Consumer Goods North America, the world's leading provider of quality and safety solutions to the consumer goods market. He also is the past President and Founder of Intertek's Risk Assessment & Management (RAM) global business line since 1988.

Prior to working at Intertek Mr. Rider was Vice President at United States Testing Company (acquired by SGS in 1983) from 1970 to 1988 where he manage US Testing's Environmental and Health Sciences Divisions. While at US Testing Mr. Rider was nominated to participate in the U.S. Environmental Protection Agency's (EPA) three-year Advisory Workshop for the development of risk analysis schemes required by the Toxic Substances Control Act.