STR technical experts attended the CPSC Staff Forum meeting on June 18, "Developing Strategies for Magnetic Toy Ingestion Hazards". Speakers included CPSC staff in the areas of Mechanical Engineering and Human Factors, medical experts from Cincinnati Children's Hospital and the Center for Disease Control (CDC), and the Chairman of the ASTM Magnets Working Group, Arthur Kazianis, along with a representative from Health Canada.

Ingested magnets can cause serious intestinal injuries. The CPSC is aware of at least 33 cases of children being injured from ingesting magnets. A 20 month-old died, and at least 19 other children from 10 months to 11 years old required surgery to remove ingested magnets.

ASTM F963-07, the Standard Consumer Safety Specification for Toy Safety, includes a new requirement, section 4.39, intended to address these ingestion hazards. The Forum provided an opportunity for further discussion on the hazard itself and whether the current ASTM requirement sufficiently addresses the hazard. The ASTM Magnets Working Group is evaluating further, including the below areas:

- possible increase in upper age from 8 years to 14 years
- validation of critical size/shape in current standard
- validation of critical magnet strength in current standard
- effectiveness of safety labeling – may use focus group to evaluate effectiveness of various warning statements
- possibility of multi-language safety labeling
- normal use testing to include repeated connect/disconnect cycles

It is expected that the ASTM Working Group will provide a webinar on the magnet requirements, including specific test methods. The need to extend the magnet restrictions beyond toys to include applicable household items was also discussed.

In addition to strengthening the ASTM F963 standard, the CPSC Forum suggested further ways to combat this emerging hazard:

- Educating parents and caregivers about the hazards of ingesting multiple magnets
- Educating the medical community on how to diagnose a magnet ingestion incident
- Studying the power of the magnets that have caused injury and consider how the most powerful magnets could have restricted use
- Coating the magnets with bittering agents that make the magnets taste bad.

STR will continue to monitor the situation and provide our clients with the most up-to-date information and appropriate recommendations. For further information, please contact Susan DeRagon at susan.deragon@strus.com.