

Exposure and Risk Assessment Approaches for Emerging Consumer Technologies and Materials

Treye Thomas, Ph.D.
Program Manager
Chemicals, Nanotechnology and Emerging Materials
Office of Hazard Identification and Reduction

U.S. Consumer Product Safety Commission



CPSC is a federal government agency charged with protecting the public from unreasonable risks of injury or death associated with the use of over 15,000 types of consumer products under the agency's jurisdiction.

Trillion Deaths, injuries, and property damage from consumer product incidents cost the nation more than \$1 trillion annually.

CPSC is committed to protecting consumers and families from products that pose a fire, electrical, chemical, biological, or mechanical hazard.

CPSC's work to improve the safety of consumer products - such as toys, cribs, power tools, cigarette lighters, textiles, and household chemicals - contributed to a decline in the rate of deaths and injuries associated with consumer products over the past 40 years.



Emerging Hazards and Trends

Emerging and future consumer products and technologies identified in this report include:

- 3D Printers and the printed products;
- Internet home-based smart technologies (IOT);
- Wearable products and technologies;
- New materials, including nanomaterials;
- Virtual reality (VR) and augmented reality (AR) games;
- Robotics, including robotic products to assist older adults



Staff Report

Potential Hazards Associated with Emerging and Future Technologies

January 18, 2017

The views expressed in this report are those of the CPSC staff, and they have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

https://www.cpsc.gov/s3fspublic/Report%20on%20Emerging%20Cons umer%20Products%20and%20Technologies _FINAL.pdf 3