

Poison Prevention, Product Safety and Development: Preventing Unintentional Exposures

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1943

1953

- 1st US Poison Controls are established to serve as a source for information and treatment

1957

- US Clearing house for Poison Control Centers
- Voluntarily reduction of strength in children's aspirin and limit number of tablets / package
- Efforts to develop "safety closures" recommended by medical advisory panel

1959

- Researchers from Durham, NC reiterate the need for "safety closures" in JAMA article

1970

- Poison Prevention Packaging Act (PPPA) is enacted requiring "special packaging" on select drugs and chemicals

1972

- Administration of the PPPA was transferred to the Consumer Products Safety Commission (CPSC from the FDA)

History of Unintentional Exposure and Safety Packaging

The Poison Prevention Packaging Act Defined Special Packaging as

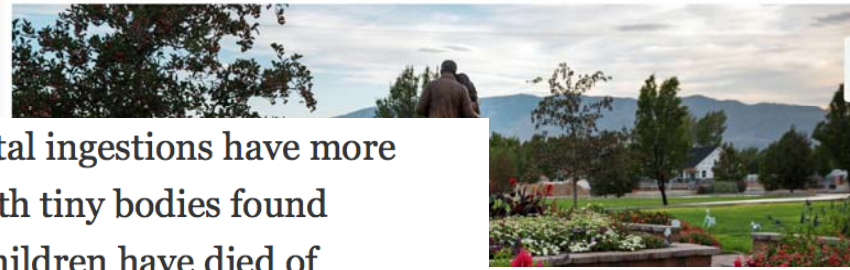
packaging that is designed or constructed to be significantly difficult for children under 5 years of age to open or obtain a toxic or harmful amount of the substance contained therein within a reasonable time and not difficult for *normal adults* to use properly, but does not mean packaging which all such children cannot open or obtain a toxic or harmful amount within a reasonable time

Pediatric Poisoning Fatality 1972-2013



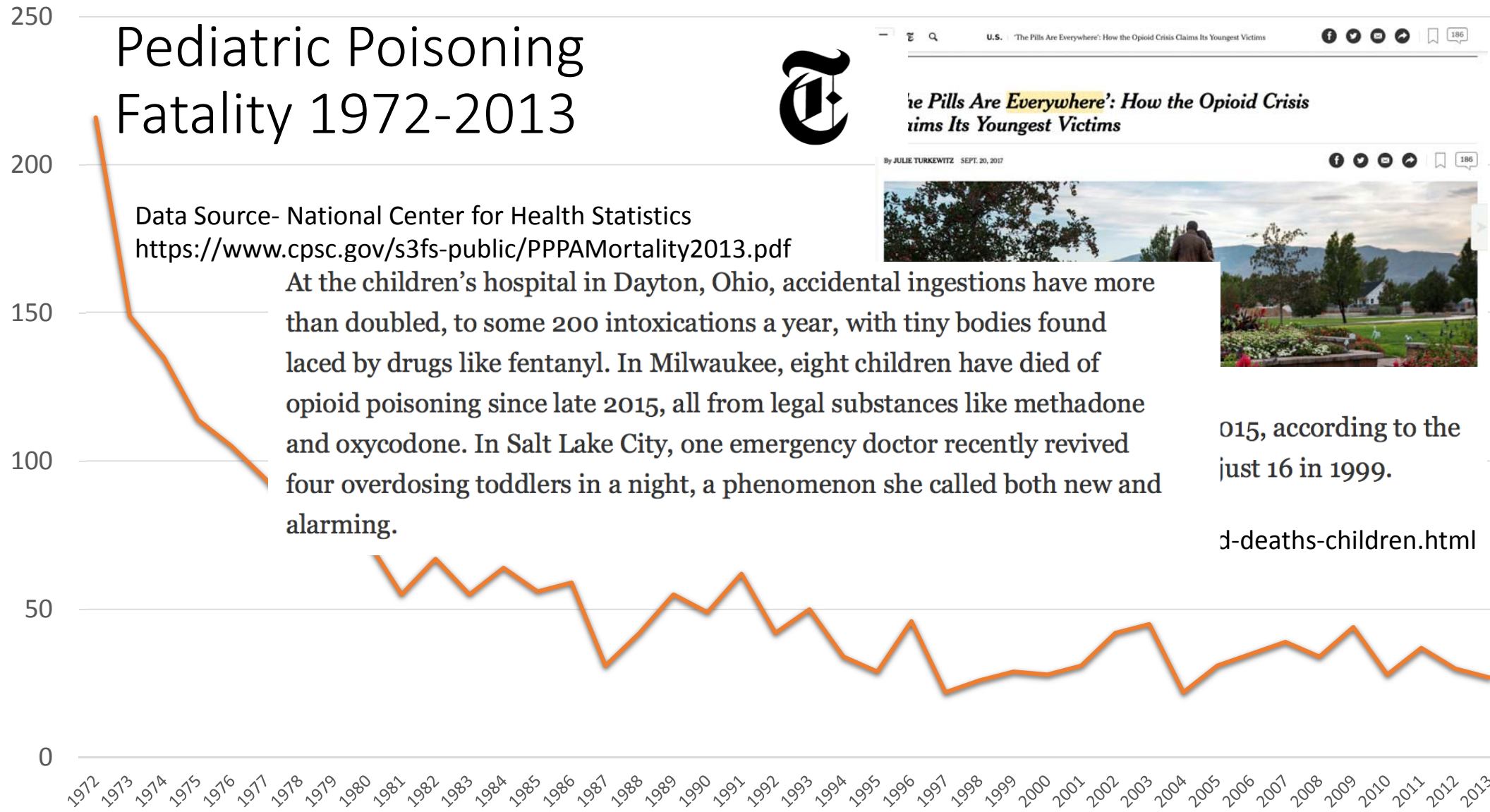
Data Source- National Center for Health Statistics
<https://www.cpsc.gov/s3fs-public/PPPAMortality2013.pdf>

At the children's hospital in Dayton, Ohio, accidental ingestions have more than doubled, to some 200 intoxications a year, with tiny bodies found laced by drugs like fentanyl. In Milwaukee, eight children have died of opioid poisoning since late 2015, all from legal substances like methadone and oxycodone. In Salt Lake City, one emergency doctor recently revived four overdosing toddlers in a night, a phenomenon she called both new and alarming.



2015, according to the CDC, just 16 in 1999.

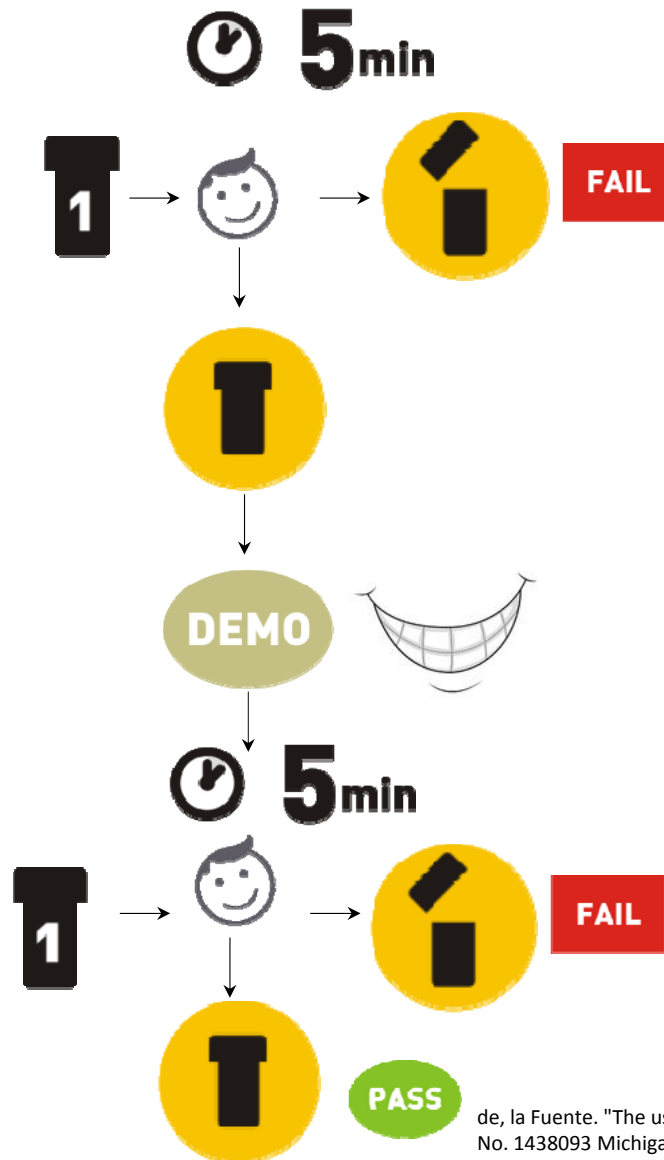
[opioid-deaths-children.html](#)



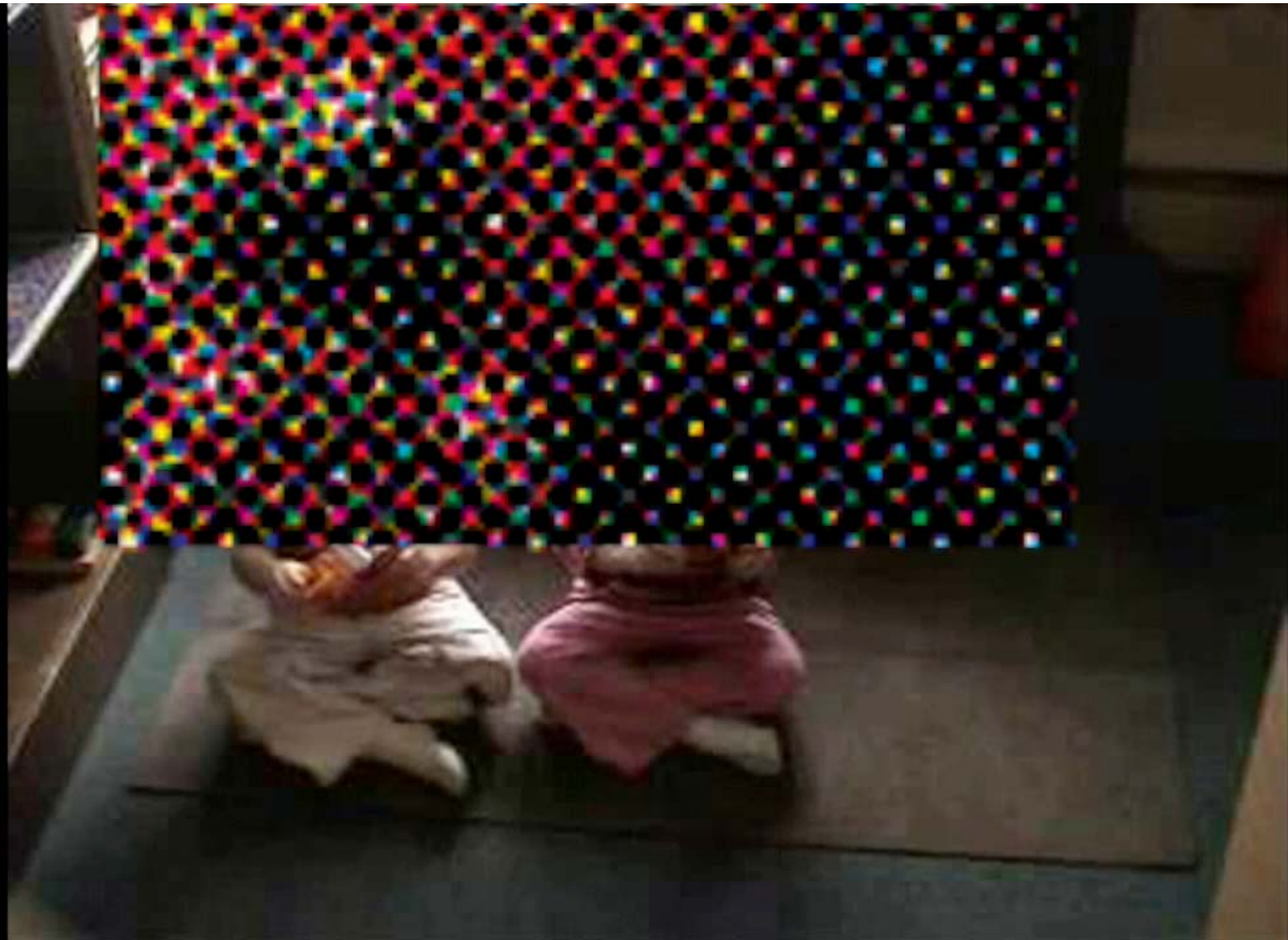
50- 200 children
42-51 months of age
Tested in pairs
In Panels of 50



Protocol Testing

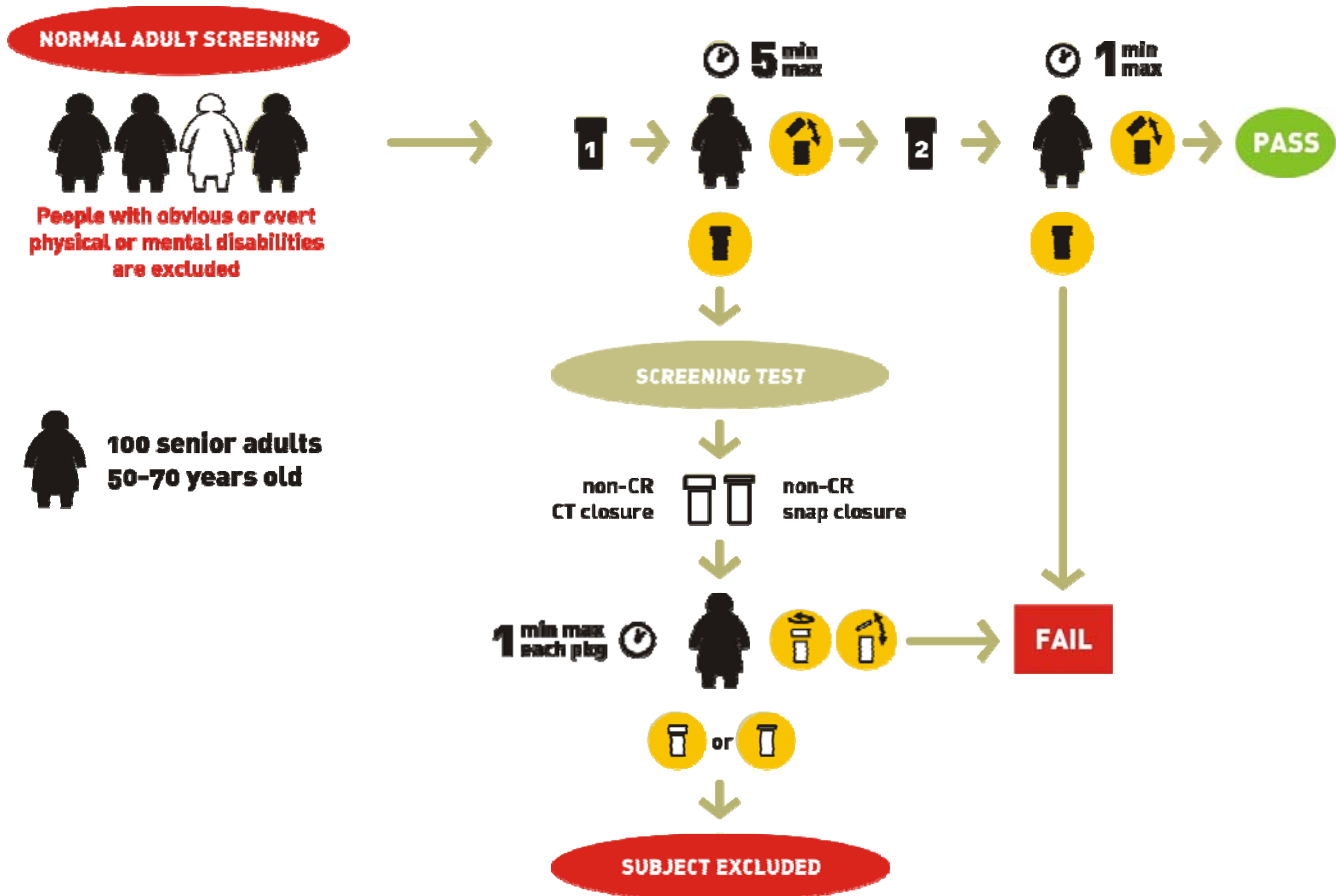


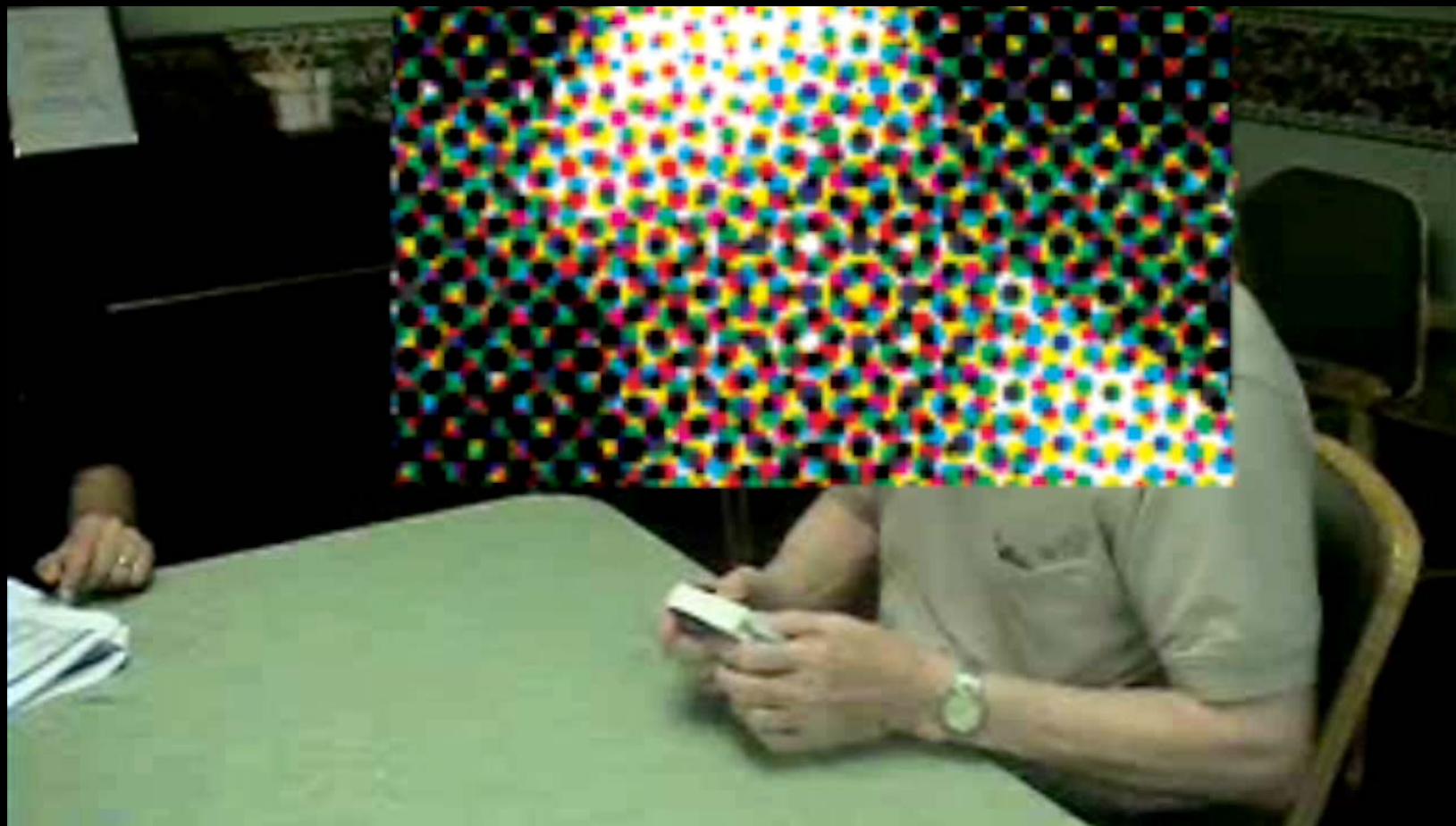
de, la Fuente. "The use of a Universal Design Methodology for Developing Child-Resistant Drug Packaging." Order No. 1438093 Michigan State University, 2006. Ann Arbor: ProQuest. Web. 6 Sep. 2017.



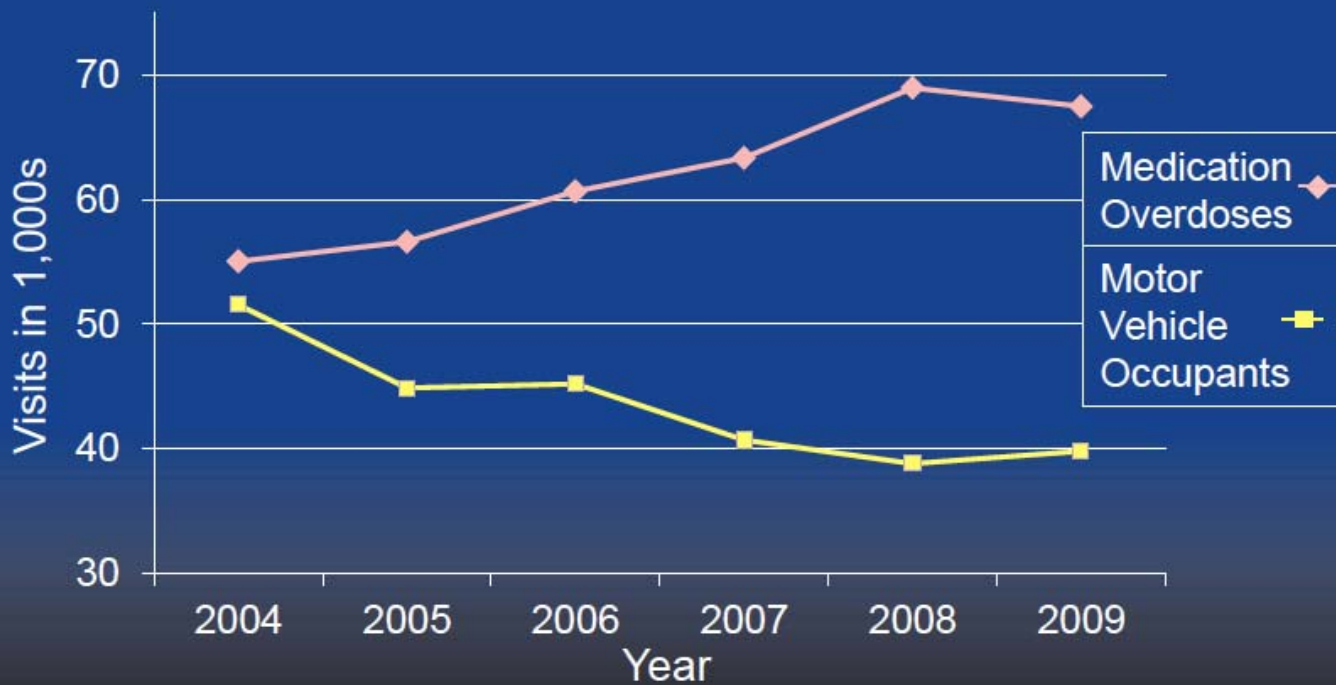
US CPSC protocol

Senior adult test





ED Visits for Motor Vehicle Occupants & Medication Overdoses (Children <5 years)



www.cdc.gov/injury/wisqars/index.html
National Electronic Injury Surveillance System-Cooperative
Adverse Drug Event Surveillance Project (NEISS-CADES)



