The Toxic Exposure Surveillance System (TESS) and Its Use at the U.S. Consumer Product Safety Commission

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These comments are those of the CPSC staff, have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.
What is TESS?

- Database containing information on all calls made to most poison control centers in the US.
- Contains 33.8 million human exposure cases from 1983 to 2002.
- Now covers 99.8 percent of the US population.
TESS at CPSC

- CPSC buys data from the American Association of Poison Control Centers annually.

- CPSC’s portion of the database includes only cases involving children under five years of age.
Contents of TESS

Important variables collected by TESS include:

- Patient demographics
  - Age, Gender, Weight
  - Much more
  - No sensitive patient ID info
Contents of TESS

Substance information
- PoisIndex code
- Substance code ("generic" code, not necessarily corresponding to PoisIndex code)
- Formulation (liquid, cream, etc.)
- Text description of substance
- Multiple substances

Scenario
- What happened?
- Where, why, how
Contents of TESS

- Clinical Effects
  - All symptoms

- Therapies
  - Care administered at home or health care facility

- Miscellaneous
  - Medical Outcome (ranges from no effect to death)
  - Route (e.g., ingestion, dermal, inhalation)
  - Management Site (e.g., home, hospital)
How does CPSC use TESS?

- Periodic analyses of number of exposures and injuries to known hazards

  Examples:
  - lamp oil
  - methacrylic acid (nail primer)

- New data analyses on number of exposures to suspected hazards or non-hazards
How does CPSC use TESS?

NEISS and TESS are compared as tests of reasonability for each other.

For example, if through NEISS we estimate 100,000 children under 5 were treated last year for poisoning by widget cleaners, but TESS only shows 5,000 were exposed, then the difference is not reasonable, and we would investigate further.
Limitations of TESS

- Changing participation by poison control centers from year to year
- Can’t be used to analyze trends because of changing participation
- Gives us only minimum counts, not total counts
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