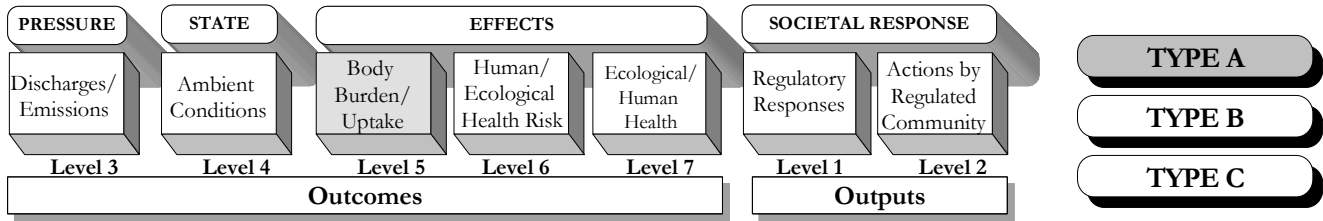




HUMAN HEALTH PATHOLOGIES AND DIRECT HEALTH IMPACTS



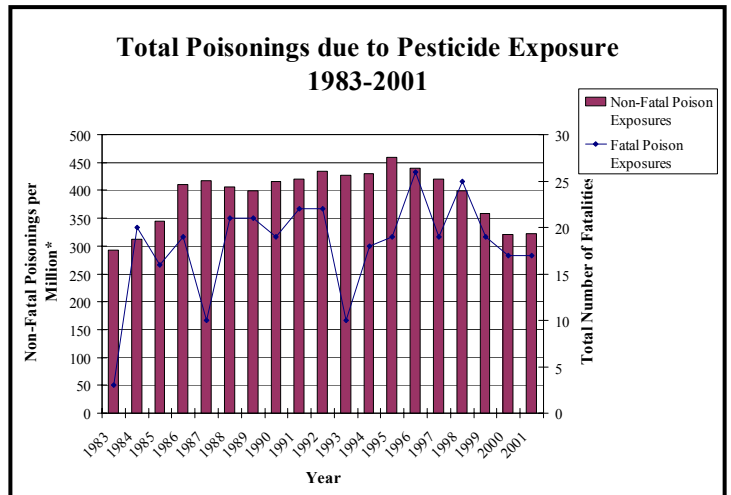
Indicator: Number of Fatal and Non-Fatal Poisonings Due to Pesticide Exposure

The American Association of Poison Control Centers (AAPCC) administers the Toxic Exposure Surveillance System (TESS), the only comprehensive poisoning surveillance database in the United States. TESS is a cumulative database, with data dating back to its inception in 1983, of poison exposure cases. These cases are poison exposures reported by telephone to one of the AAPCC's regional poison control centers.

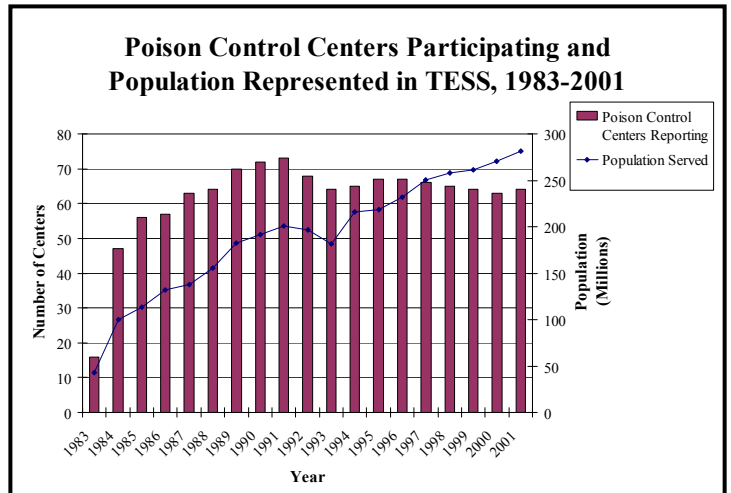
For each reported exposure, the gender, age and location of each caller is recorded. The locational site of exposure, substance(s) involved, reason for and route of exposure are also recorded for each case. To complete the profile of the poison exposure case, the medical outcome and intervention (type of decontamination and/or therapy) are also documented.

Each year, the AAPCC reports that pesticides are one of the substances most frequently involved in poison exposures and in fatal poison exposures. The chart displays poisonings due to pesticide exposure per million people and total fatalities for the years 1983-2001.

- The number of non-fatal poisonings gradually rose to a peak of 460 per million people annually in 1995. Since that time, the trend has continued to decrease with each subsequent year.
- The total number of fatalities due to pesticide exposure fluctuates annually, but has remained below 30 deaths per year.



*Per million people in the population serviced by participating poison control centers



Source: Annual Report of the AAPCC TESS published in the American Journal of Emergency Medicine, 1984-2002.

Scale: Data are available on the national level. States are not comparable due to variations in Poison Control Center participation.

Data Characteristics and Limitations: The cumulative AAPCC database contains 22.6 million human poison exposure cases for the reporting years 1983-2001. Each year, the AAPCC publishes an annual report of select releases of TESS data in the September issue of the American Journal of Emergency Medicine. Since 1983, TESS has grown dramatically, with increases in the number of participating poison centers and population served by those centers (refer to chart below).

Annual changes in the number of human poison exposure cases may reflect changes in participation and reporting of cases may not be accurate due to self-reporting. Pesticides may not be the cause of all poisonings because the sources of exposures were not verified.

To control for the increase in annual reporting, the reported indicator is the number of non-fatal poisoning cases due to pesticide exposure per million people in the serviced population.

The following TESS categories of products are reflected in the number of pesticide exposures in the indicator data series: fungicides, herbicides, insecticides/pesticides, moth repellents, and rodenticides.

A noteworthy limitation of the TESS data is that diagnoses are not established, except in cases of known ingestion. The health effects associated with the poison exposure are reported and not proven through thorough investigation (Wagner).

References

Annual Report of the AAPCC TESS published in the American Journal of Emergency Medicine, 1984-2002.

Telephone conversation with Dr. Sheldon Wagner, Clinical Toxicologist,
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