

## TOXICOLOGICAL PROFILES

### WHAT IS THE PUBLIC HEALTH ISSUE?

- The American Chemistry Council estimates that more than 75,000 chemical substances are used in commerce.
- The Agency for Toxic Substances and Disease Registry (ATSDR) has produced about 160 toxicological profiles that cover about 800 substances.
- ATSDR focuses on 275 substances that are considered the most hazardous to human health. Thousands of potentially toxic mixtures can be derived from these chemicals.

### WHAT HAS ATSDR ACCOMPLISHED?

ATSDR produces toxicological profiles for hazardous substances found at National Priorities List (NPL) sites (i.e., sites targeted for clean-up by the Environmental Protection Agency [EPA]). When deciding which substances to profile, ATSDR, EPA and the National Institute for Environment Health Sciences use criteria including the rank by frequency of occurrence at NPL sites or in emergency response situations, relative toxicity, likelihood of human exposure to the substance, and calculation of the number of people actually or potentially exposed.

Each profile succinctly characterizes the toxicologic and adverse health effects information for the hazardous substance it describes. In each toxicological profile document, ATSDR interprets all known information about the substance and reports on how these substances can affect the health of an exposed person. The profiles also identify substantial gaps in knowledge about a specific substance and serve to initiate further research when needed.

The profile is a detailed document, but is not designed to be exhaustive. Each profile includes references to more comprehensive sources of specialty information. In 2002, ATSDR released *ATSDR ToxProfiles 2002™*, which contained 159 toxicological profiles on CD-ROM. Toxicological profiles are also available on the ATSDR Internet website at [www.atsdr.cdc.gov/toxpro2.html](http://www.atsdr.cdc.gov/toxpro2.html). ATSDR also produces ToxFAQs™ to provide easy-to-understand toxicologic information to the public. These are available in print (in English and Spanish) and on the Internet.

### WHAT ARE THE NEXT STEPS?

New research, new interpretations of existing research, and filling of data gaps are among the events that lead to an update of a toxicological profile. New profiles also are developed as needed. Information about how exposure to toxins affects children is being added to the profiles. ATSDR is also developing interaction profiles, which contain information about common mixtures of hazardous substances.