

*Annotated  
Strategic Plan*



*U.S. Consumer Product Safety Commission*

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## U.S. Consumer Product Safety Commission Strategic Plan

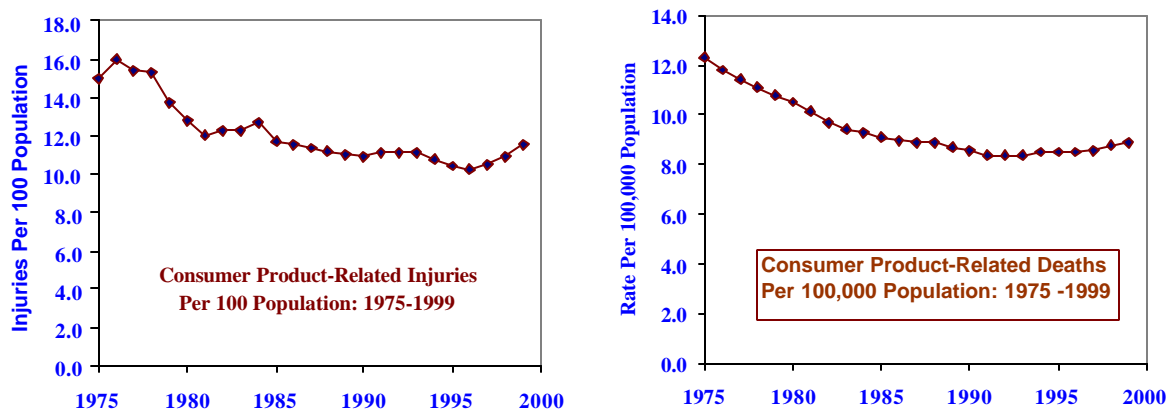
### Introduction

#### THE PROBLEM

Unintentional injuries are the leading cause of death for Americans between the ages of 1 and 35 and are the fifth leading cause of death in the nation. Children under five are the age group most likely to require emergency room treatment and the elderly are the age group most likely to die as a result of product-related injuries. Each year, there are an average of 23,900 deaths and over 32.7 million injuries associated with the consumer products under the jurisdiction of the U.S. Consumer Product Safety Commission (CPSC). These injuries and deaths cost the American public over \$700 billion annually.

Although product-related deaths and injuries remain a significant problem, consumer products are much safer today than in the past. The work of CPSC has contributed significantly to the approximately 30 percent decline in the rate of injuries and deaths related to hazardous products since the agency's inception (Figure 1).

Figure 1



We have also been successful with our first Strategic Plan under the Government Performance and Results Act

(GPRA). Of the five hazard reduction strategic goals, we reached our targets for four of them: reducing deaths due to fire, electrocutions, and carbon monoxide poisonings, and maintaining the low rate of child poisonings. Annual consumer product-related deaths in these hazard areas decreased by almost 500 (approximately 14%) at the end of the six years covered by our first Strategic Plan.

Much more needs to be done, however, to protect American families from product-related deaths and injuries. In establishing CPSC, Congress noted that consumers are often unable to anticipate risks from consumer products or to safeguard themselves, not only because of the complexities of some consumer products in the marketplace, but also because of the diverse nature and abilities of those who use the products. This is as true today as it was then. Furthermore, many consumer products are sufficiently complex and the hazards of even uncomplicated products are sufficiently hidden that government action to inform or otherwise protect the public is justifiable and a wise use of taxpayer dollars.

## CPSC'S MISSION

CPSC, an independent health and safety regulatory agency, is responsible for protecting the American public from unreasonable risks of injury and death from about 15,000 types of consumer products. Our mission is simple and non-partisan: saving lives and keeping families safe. Specifically, we are charged with the following:

- *To protect the public against unreasonable risks of injury associated with consumer products;*
- *To assist consumers in evaluating the comparative safety of consumer products;*
- *To develop uniform safety standards for consumer products and to minimize conflicting state and local regulations; and*
- *To promote research and investigation into causes and prevention of product-related deaths, illness and injuries.*

The Commission was established by the Consumer Product Safety Act and also administers four additional laws: the Flammable Fabrics Act, the Poison Prevention Packaging Act, the Federal Hazardous Substances Act, and the Refrigerator Safety Act (Appendix A, page 55).

This strategic plan focuses on two key aspects of CPSC's mission: reducing unreasonable risk of injury and death associated with consumer products, and reaching consumers with safety information to enable them to judge the comparative safety of consumer products.

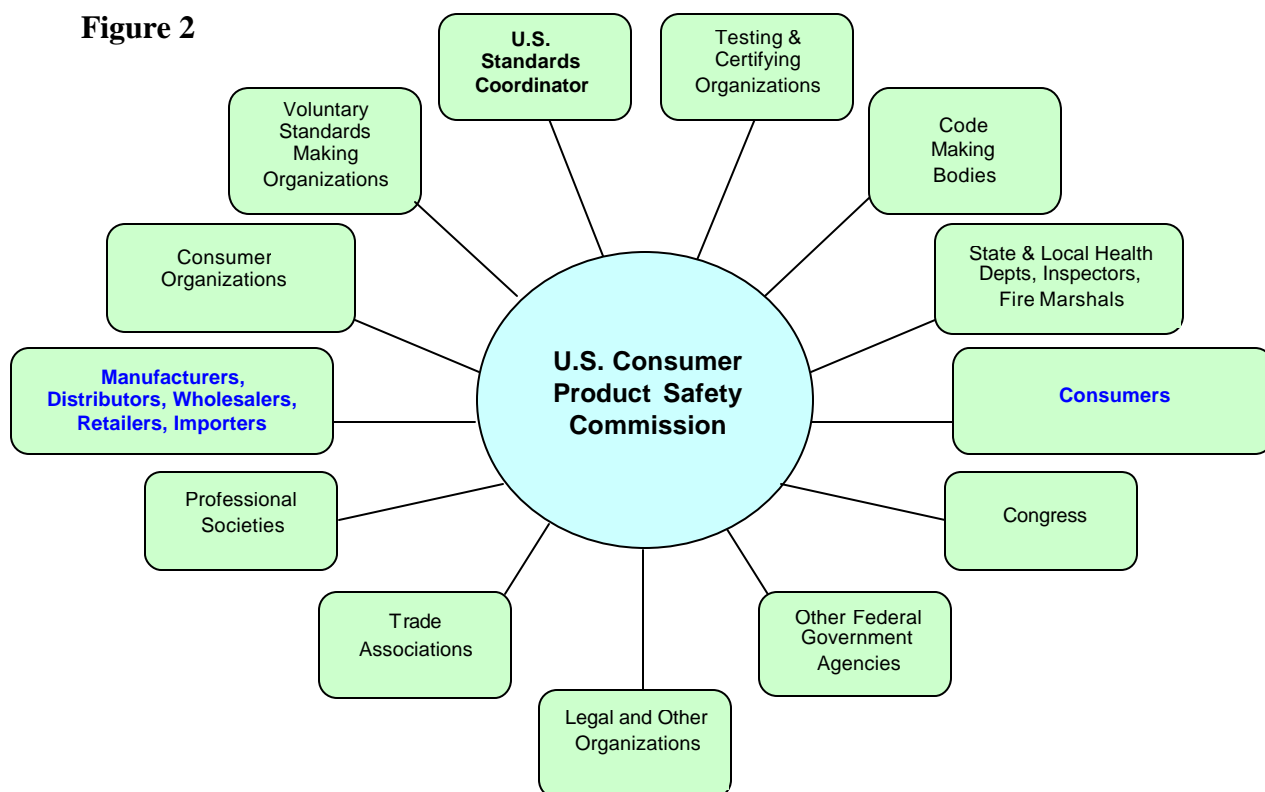
## CPSC'S UNIQUE ROLE

CPSC plays a unique role because it is the only federal agency that identifies *and* acts on a wide range of consumer product hazards. The role of the Federal Government is critical. The problem of consumer product-related injuries and deaths cannot be solved solely by states or localities. CPSC was created as a federal agency in part because inconsistent state or local regulation may create a significant burden on interstate commerce.

Enforcement of product safety standards at the state and local level is also difficult because modern transportation and distribution systems make it easy to move products from coast to coast in a matter of hours. The dramatic increase in sales of goods over the Internet, eliminating the need for a physical store location or any local presence in a state, makes it extremely difficult to find the manufacturers or distributors of goods so as to ensure their compliance with safety laws. Because today's marketplace is increasingly international, federal authority is also necessary to prevent potentially hazardous imports from entering the United States.

While CPSC has the primary role for reducing safety hazards related to consumer products, we work closely with a host of other organizations to more efficiently address safety issues, enhance our effectiveness, and avoid duplication of effort. We also use a variety of techniques to effectively and economically communicate safety information to the public and encourage feedback. Figure 2 on the following page shows this safety system.

Figure 2



## CPSC'S PERFORMANCE REDUCES SOCIETAL COSTS

CPSC measures its performance by reductions in deaths, injuries and other costs to the nation, such as health care costs and property damage. Each year CPSC saves the nation many times its annual budget. For example, we have achieved substantial reductions in deaths and injuries associated with a wide variety of hazards since the inception of the agency. Based on these reductions, each year we expect to prevent:

- *1,600 fire deaths.*
- *460 electrocution deaths.*
- *140 infant deaths* from work addressing suffocation and strangulation hazards associated with cribs. In addition, CPSC's work on suffocation associated with soft bedding likely prevents many additional infant deaths each year.
- *Over 13,000 head injuries* to children using playground equipment and baby walkers.



- *40 child-poisoning deaths* through our child-resistant packaging efforts.
- *Almost 60 carbon monoxide (CO) poisoning deaths.*
- *About 40,000 injuries* by removing dangerous fireworks from the marketplace.
- Many more deaths and injuries, as a result of the heightened attention to safety by manufacturers' and consumers' due to CPSC leadership.

The annual number of deaths and injuries prevented by these examples reduced societal costs by over \$13 billion; these savings are about 200 times CPSC's proposed 2004 funding.

## HOW WE REDUCE HAZARDS

The Commission uses a variety of tools to reduce the risks of hazardous consumer products. These tools include (1) developing and strengthening voluntary and mandatory safety standards; (2) compliance activities such as recalls and corrective actions of hazardous products and enforcement of existing regulations; and (3) alerting the public to safety hazards and safe practices. In addition, the agency bases its actions to reduce the risks of hazardous consumer products on information developed from its extensive data collection systems that assess the causes and scope of product-related injuries.

## Safety Standards

Much of our work in saving lives and making homes safer is through cooperation with industry. Since 1990, we have worked cooperatively with industry and others to develop 214 voluntary safety standards while issuing only 35 mandatory rules, over a six-to-one ratio of voluntary to mandatory standards.

We participate in the development of voluntary standards at a number of steps in the process. Staff first submits recommendations for new standards, or modifications of existing standards, to organizations that develop voluntary standards. The organizations complete technical work to support the requirements, publish a proposal for public comment, and publish a standard. We participate in the process by providing expert advice, technical assistance, and information based on data analyses of how deaths, injuries and/or incidents occurred. Our voluntary standards policy does not permit us to vote on proposed changes or new standards; however, our comments are considered throughout the process.

This process can take months or it may take several years. While the development of recommendations is within our span of control and the actual development of proposed standards within our span of influence, the publication and effective dates for the consensus voluntary standards are not.

Safety standards may also be developed through regulation. We usually work cooperatively with industry to develop an effective voluntary standard. If a voluntary standard exists, by law, we may issue a mandatory standard only when we find that the voluntary standard will not eliminate or adequately reduce the risk of injury or death or it is unlikely that there will be substantial compliance with the voluntary standard.

## Compliance

In 2002, CPSC completed about 390 cooperative recalls involving over 50 million consumer product units that either violated mandatory standards or presented a substantial risk of injury to the public. Although we have neither the authority nor the resources to approve products for safety before they are marketed, we can work with companies to remove products from the marketplace if we learn that they violate mandatory safety standards or are defective, creating a substantial risk of injury or death.

Headquarters and field staff identify defective products through their own investigations. In addition, firms are required by law to report potential product hazards or violations of standards to the Commission. If an evaluation justifies seeking a product recall, we work with the firm to cooperatively recall the defective or violative product. In nearly all cases, firms work cooperatively with us. If a firm refuses to recall a product voluntarily, we may litigate to require a recall.

To assist industry in cooperatively recalling products and complying with our regulations easily and quickly, we rely on two activities: Fast-Track product recalls and our Small Business Ombudsman. We developed the Fast-Track program to streamline the process of recalls for firms that were willing and prepared to recall their products quickly. Because every recalled defective product represents a potential injury or death, removing these hazardous products from the marketplace faster can prevent more injuries and save more lives. Recalls under the Fast-Track program are almost three times faster than traditional recalls and, on the

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average, are implemented within eight days of a firm's report to CPSC.

We also established a Small Business Ombudsman to help small firms comply more easily with product safety guidelines by providing them with a single point of contact for assistance and information. The Ombudsman coordinates a clearly understandable response from our technical staff so that firms receive the information they need within three business days.

## Consumer Information

We warn the public about product-related hazards through print and electronic media, our hotline and web site, and other outreach activities. We develop and provide safety information for the public through safety alerts, news releases, video news releases, publications, national and local television appearances, and hotline messages. When knowledge of a hazard requires immediate warnings to the public, such as the recall of a playpen that caused the death of a baby, we rely heavily on the media (newspapers, radio, TV, video news releases). For warnings that need to be repeated -- and most do -- we often rely on outreach by partnering with other organizations and by developing programs, such as Baby Safety Showers and Recall Roundups, which are easily replicated by other organizations.

We improved our web site, consumer hotline, and Clearinghouse to better serve the public. CPSC's web site has grown rapidly from about 200,000 visits in 1997 to 7.9 million visits in 2002. We post and spotlight recall notices on the web site the same day as the news release announcing the recall. Consumers and firms can file reports of unsafe products on-line and firms are ensured of confidentiality by encrypted transfer of data. Product safety information is also available in Spanish and children can access a special section of the site, *4 Kids*, which has safety information.

The hotline receives consumer complaints and provides information on product hazards and recalls to the public. The National Injury Information Clearinghouse provides injury data to our staff and the public and provides manufacturers with consumer complaints, reported incidents, and incident investigations involving their products.

## HOW WE IDENTIFY HAZARDS

CPSC collects data on consumer product-related injuries and deaths, as well as economic and hazard exposure information, for products under our jurisdiction. We also investigate specific injury cases to gain additional knowledge about injuries or hazards and how the reported product was involved. We systematically analyze this information to determine where hazards exist and how to address them. These activities reflect the agency's commitment to making decisions based on appropriate data analyses. This work provides underlying support to all the Commission's safety activities.

Each year, we collect information about product-related injuries treated in hospital emergency rooms through our National Electronic Injury Surveillance System (NEISS). This unique system provides statistically valid national estimates of product-related injuries from a probability sample of hospital emergency rooms. In 2003, NEISS will supply about 360,000 product-related cases from a sample of about 100 hospitals. The hospitals transmit incident information electronically, and in some cases, the data are available within 24 hours after an incident. Several foreign governments have modeled their national injury data collection systems after the Commission's system.

CPSC also collects mortality data. We purchase, review, and process about 8,700 death certificates each year covering unintentional product-related deaths from all 50 states. Our Medical Examiner and Coroner Alert Project collects and reviews approximately 3,000 additional reports from participating medical examiners and coroners throughout the country. We also collect and review about 5,000 news clips and 10,000 other reports of product-related injuries and deaths from consumers, lawyers, physicians, fire departments and others.

## THE STRATEGIC PLAN

The Commission's 2003 Strategic Plan focuses on three results-oriented goals, two service quality/customer satisfaction goals, and one management initiative.

To develop our three results-oriented strategic goals for injury and death reductions, Commission projects and activities were grouped using a hazard classification system (see box on following page). Commission staff with expertise in each hazard area participate on a program team for that hazard. The teams developed candidate goals for

their area. Candidate goals were presented to the Commissioners who chose strategic goals from among the candidate goals. Future strategic plans may set goals in other hazard classification areas.

#### **Hazard Classification System**

- *Fire*
- *Mechanical*
  - Children's Products
  - Household/Structural Products
  - Power Tools and Equipment
  - Sports and Recreation Activities
- *Electrical*
- *Chemical*

To develop service quality/customer satisfaction goals, the agency focused on those services that directly touch industry and consumers.

The 2003 Plan includes a new management initiative. This initiative will develop a more systematic approach to analyzing product-related death and injury data, allowing us to have a more comprehensive process in place to produce potential candidates for new strategic goals in the future. This system will become part of an ongoing process, routinely producing hazard reduction projects and potential strategic goals. We expect this process to contribute to the development of goals for the next revision of the Strategic Plan in 2006 or sooner, if appropriate.

### **COMMUNICATING GOALS AND ASSIGNING ACCOUNTABILITY**

Strategic goals are an integral part of the method by which CPSC operates. CPSC uses hazard area teams to develop and propose projects. These teams are composed of staff representatives from all major offices of the agency. The teams develop strategic goals for their hazard areas, determine the means and strategies to meet these goals, propose specific projects to meet these goals, and report progress towards the goals several times each year through information supplied for performance budgets, operating plans and annual performance reports. Since a large proportion of the staff participates in at least one team, staff at all levels are aware of agency goals.

All staff are evaluated on their success in supplying information needed to meet goals. In addition, managers and supervisors are specifically evaluated on their success in meeting goals associated with the strategic plan and annual performance budget plans.

**RESULTS-ORIENTED GOALS**







## KEEPING FAMILIES SAFE FROM FIRES

**STRATEGIC GOAL: Reduce the rate of death from fire-related causes by 20 percent from 1998 to 2013.**

### THE HAZARD

In 1998, over 2,600 people died and more than 15,000 were injured because of fires that started in their homes. These fires resulted in property losses of about \$3.6 billion.

Children are particularly vulnerable. In 1998, about 700 children under the age of 15 died of fire-related causes and over 300 of these deaths were to children under the age of 5 years. In fact, children under age 5 have a fire death rate more than twice the national average. Children from low income and minority families who live in poorer urban and rural areas are often at increased risk of fire-related deaths.

Most deaths occur from fires that start at night while families are asleep. Four times as many victims die from inhaling smoke and toxic gases as from burns. Products most often involved in fire deaths are electrical products (about 900 deaths), upholstered furniture (about 600 deaths), mattresses and bedding (about 500 deaths), and fuel-fired heating equipment (over 300 deaths).

For a graph of consumer product-related fire death data and a discussion of issues related to setting the current goal, see Appendix B "Fire Deaths," page 57.

### REDUCING THE RISK

Deaths due to fire have been substantially reduced since the 1980s. There were about 1,600 fewer home fire-related deaths in 1998 than there were just 10 years earlier because of the efforts of CPSC and others (1998 is the most recent year for which data are available). The average risk of death decreased from about 17.2 in the mid-1980s to 9.8 deaths per million population in 1998.

As in previous years, estimates of fire deaths continue to show annual incremental reductions that are distributed over a broad range of consumer products. These include reductions in fire deaths involving cigarette ignition of long-life products such as upholstered furniture and mattresses, for which standards have been in place for many years. CPSC's standard for child-resistant lighters also has reduced the number of fire deaths.

Our continuing work with a wide variety of voluntary standards in the electrical fire area has resulted in improved general electrical installation and product performance requirements whose results are evident over a broad range of products rather than targeted to specific products.

Our contribution to this success can be attributed to our work with industry in developing a number of voluntary and mandatory safety standards (see box below for current fire safety standards), public information campaigns, working in partnerships with other interested groups

### Fire Safety Standards

Smoke alarms  
 Sprinklers  
 Child-resistant lighters  
 (cigarette and multi-purpose)  
 Children's sleepwear  
 Clothing  
 Mattresses  
 Upholstered furniture  
 Carpets  
 Candles  
 Cellulose insulation  
 Electrical Products  
 Clothes dryers  
 Electric blankets  
 Electric space heaters  
 Electric appliances  
 Extension cords  
 Halogen lamps  
 Heat tapes  
 Holiday lights  
 Home wiring  
 Receptacle outlets  
 Recessed light fixtures  
 Television receivers  
 Thermoplastics  
 Fireworks  
 Heating Systems  
 Gas furnaces  
 Kerosene heaters  
 LP gas systems  
 Woodburning stoves  
 Gas water heaters

and continuing compliance efforts. We also pursue an average of more than 500 violations, recalls and corrective actions a year for products with fire hazards, such as

flammable clothing, computers, fireworks, small and large appliances, and gas valves.

## SETTING THE STRATEGIC GOAL

To further reduce fire-related deaths, we set a goal to reduce the death rate by an additional 20 percent. At 20 percent, fire-related deaths would be reduced from about 9.8 in 1998 to 7.8 deaths per million population by 2013 (a total fire death rate reduction of 30 percent from the time our first strategic plan went into effect). Although it is important to remember that fire deaths may fluctuate considerably from year to year, a decade-long span provides an adequate period of time to measure our progress toward achieving the overall goal set forth in this plan.

This goal was determined by examining the frequency, severity and addressability of fires related to specific consumer products and the future development of home fire detection and suppression technology. The percent decrease in the death rate may be somewhat smaller than would be expected based on the reductions seen in the 1980s. This is because many of the improvements that occurred during that time period addressed products with the largest numbers of fire deaths. Future activities will address the next tier of products that are associated with a smaller number of fire deaths.

## STRATEGIES

There are a number of effective strategies that can help reduce fire deaths. We believe that these strategies will also help reduce injuries associated with fires.

Strategies include: the wider availability of safer products, early warning systems, improved fire control and suppression, public information, more effective building codes, and better medical treatment. With the exception of better medical treatment, we have used or promoted all these strategies to reduce fire-related deaths from consumer products.

For example, we worked with manufacturers to develop a standard on child-resistant cigarette lighters that went into effect in 1994. Fire loss data showed that, prior to the standard, there were an average of about 7,250 residential fires, 190 deaths and 1,290 injuries due to cigarette lighters. The majority of these victims were children under age 5. We estimate that in 1998 alone this standard prevented 100 fire deaths, resulting in substantial net societal savings.

We will use the following strategies to meet the strategic goal of reducing the fire-related death rate:

- Address the hazards associated with small open-flame ignition of upholstered furniture and mattresses.
- Participate in research partnerships to advance smoke alarm technology and encourage the strengthening of existing voluntary safety standards to further improve the reliability and effectiveness of smoke alarms.
- Continue to work with consumers and other organizations to encourage the increased use and maintenance of smoke alarms and the use of residential sprinklers in new and retrofit home construction.

- Encourage the replacement of hazardous electrical wiring systems in older homes.
- Continue to participate in the National Electrical Code (NEC) development process to improve the safety of electrical installations. For example, CPSC staff has developed several proposals to revise the 2005 edition of the NEC to increase the use of arc-fault circuit interrupters in homes.
- Address the hazards associated with range fires by conducting research on the use of sensors and associated electrical control systems to minimize the risk of fires from improper operation of appliances or from failures of those appliances. For example, CPSC has demonstrated the use of sensors to modulate the energy used in cooking, which can minimize the risk of a food fire. At present, CPSC staff is evaluating the performance of various types of sensors that may be able to detect pre-hazard signatures in failing appliances.
- Continue participation in selected voluntary standards committees to enhance industry's efforts to manufacture safer products.
- Continue enforcement of mandatory flammability performance standards to reduce fire deaths related to ignition of mattresses, carpets, children's sleepwear, and wearing apparel and deaths due to child play with cigarette and multi-purpose lighters.
- Increase public awareness of critical fire safety information and expand our efforts to promote consumer awareness of electrical safety issues through tar-

geted multilingual information campaigns. These campaigns will focus on older homes and vulnerable populations, such as children, the elderly, the economically disadvantaged, and non-English speaking persons. The effectiveness of these information campaigns can be enhanced by developing partnerships with interested parties who can assist in distribution of our electrical safety materials.

- Continue to pursue recalls or develop corrective action plans for products that do not comply with safety regulations or defective products that present a substantial product hazard.
- Continue ongoing surveillance of fire incident data and reports to identify and act on emerging or unknown product-related fire hazards.
- Seek partnerships with states and public and private organizations to achieve more cost-effective solutions to identify and address fire hazards.
- Pursue mandatory standards, where appropriate, to reduce the risk of fire deaths related to consumer products.
- Continue work with the Bureau of Customs and Border Protection to prevent violative imports from entering the country.

## PERFORMANCE MEASURES

We use the annual residential fire-related death rate per million population as the primary performance measure to evaluate our strategic goal. We track consumer product involvement in fire-related deaths, injuries, fires, and property damage

annually. When appropriate, we will also estimate and report societal costs or savings.

Information on consumer product-related fire deaths is developed from death certificates purchased by CPSC from the states and from information from the National Fire Protection Association (NFPA), and the U.S. Fire Administration (USFA). The population of various age groups in the United States is available from the Bureau of the Census, U.S. Department of Commerce. Societal costs include information from our Injury Cost Model and other sources and an assumed cost of \$5 million per statistical life, consistent with economic literature.

See Appendix B, page 57 for a discussion of consumer product-related fire death data and issues related to the time needed to develop it.

## OTHER ORGANIZATIONS WITH SIMILAR PROGRAMS

CPSC has the primary role for reducing fire hazards related to consumer products and also enforces the Flammable Fabrics Act. We work closely with staff of other organizations in order to address fire issues more efficiently, to enhance the effectiveness of our efforts to achieve fire loss reduction goals, and to avoid duplication of effort. These include:

- American Gas Association (AGA)
- American National Standards Institute (ANSI)
- Association of Home Appliance Manufacturers (AHAM)
- ASTM International (ASTM) (private standards-setting organization)
- Building Code Groups

- Bureau of Customs and Border Protection, U.S. Department of Homeland Security
- Congressional Fire Services Institute (CFSI)
- Electrical Safety Foundation International (ESFI)
- Federal Aviation Administration (FAA)
- National Association of State Fire Marshals (NASFM)
- National Center for Injury Prevention and Control, U.S. Centers for Disease Control and Prevention (CDC)
- National Electrical Manufacturers Association (NEMA)
- National Fire Protection Association (NFPA)
- National Highway Traffic Safety Administration (NHTSA)
- National Institute of Standards and Technology (NIST)
- National Park Service (NPS)
- Occupational Safety and Health Administration (OSHA)
- Underwriters Laboratories, Inc. (UL)
- U.S. Department of Housing and Urban Development (HUD)
- U.S. Fire Administration (USFA)
- Various state and local governments
- Various trade associations

The USFA collects and provides essential data on residential fires, stimulates new technology, and conducts public information campaigns relating to fire. NIST performs basic and applied research in the fire sciences, provides their facilities for special fire testing, and serves as a comprehensive resource for standards information. The National Center for Injury Prevention and Control, CDC, working with state health departments, is evaluating the effectiveness of interventions in increasing smoke alarm use and reducing residential fire-related injuries, deaths and related

health care costs. CFSI was a member of the Steering Committee of CPSC's National Smoke Detector Project.

We communicate with other agencies that have regulatory authority and conduct fire research in areas beyond our jurisdiction, such as the FAA (aircraft), OSHA (workplace), NHTSA (automotive), and HUD (manufactured housing). NFPA, a private-sector organization, has a major role in the collection and analysis of residential fire data in addition to developing and publishing this country's national fire codes, investigating major fires, and conducting public information programs. We continually communicate and interact with these and other organizations, including state and local agencies.

We formed a multi-agency (both public and private) task force to conduct research on the effectiveness of current and emerging smoke alarm technologies for residential use. Several sponsors (CPSC, UL, NFPA, USFA, CDC, and HUD) are providing funding for NIST to perform these tasks.

USFA has provided supporting funds for our projects on range fires, smoke alarms, and home electrical wiring systems. FAA, NIST, and the State of California have consulted with us on technical issues related to upholstered furniture. We participate in the CDC Healthy People 2010 Work Group on Fire Prevention, and we have provided limited funding in support of their fire prevention initiative.

We maintain continuing liaison with USFA on a variety of other fire-related topics including fire investigation training, data collection and analysis, and public education. Our close coordination with other agencies and the fire community will continue.

We also work with a number of organizations, such as NFPA, AGA, UL, ANSI, and ASTM on voluntary standards designed to reduce fire hazard deaths.

In addition, we work closely with these and other organizations, such as NEMA, AHAM, and ESFI, to enhance our effectiveness in reducing fires of electrical origin.

## KEY EXTERNAL FACTORS

Certain external conditions may arise over the strategic planning period that could influence the achievement of our strategic goal. These include:

**Congress.** CPSC has little or no discretion over projects mandated by the Congress. Unexpected Congressional mandates may divert resources from fire reduction activities.

**Petitions.** Although CPSC can choose to accept or reject suggestions that are submitted by petition, staff resources are needed to evaluate a petition before the decision to accept or reject it can be made. Unanticipated petitions may divert resources from fire reduction activities.

**Partnerships.** Sometimes events can work positively towards achieving our strategic goal. For example, cooperative funding from other government agencies opened new alternatives to hazard reduction in the fire area. Such funding for smoke alarm research is giving us new insight into effective warning of a fire hazard and how to address nuisance alarms.

## RISK MANAGEMENT

Changes in management and internal agency operations and functions may affect the achievement of strategic goals generally, including the goal of reducing residential fire deaths. We have, however, identified no particular risks associated with this goal.

## CROSSCUTTING GOALS

In our unique mission among federal agencies of identifying and reducing consumer product-related fire deaths, one of the tools we use is working with other federal agencies to avoid duplication of effort and to more efficiently address risks.

We identified three federal agencies with similar overall strategic goals: the Federal Emergency Management Administration (FEMA), the Department of Health and Human Services (HHS) and the Department of Commerce (DOC). These agencies have goals involving reductions in fire deaths.

Our strategic goal to reduce *residential* fire-related deaths is similar to FEMA's strategic goal to reduce *all* fire-related deaths. It is also related to HHS's objective to reduce the incidence and impact of injuries and violence in American society, including fire-related deaths

The work at our respective agencies is mutually reinforcing. CPSC's contribution includes developing safety standards; initiating recalls and corrections of defective products; conducting technical feasibility studies; and issuing press releases, safety alerts, and warnings to increase public awareness of product safety hazards.



FEMA, through the U.S. Fire Administration (USFA), collects and provides essential data on residential fires, stimulates new technology, provides training for the fire protection community and conducts public education campaigns relating to fire.

HHS, through the Centers for Disease Control and Prevention (CDC), supports state and local health departments, academic institutions, community-based organizations for applied research, intervention evaluation, training, and surveillance in injuries.

The DOC, through the National Institute of Standards and Technology (NIST) within DOC's Technology Administration, performs research and testing in support of their goal of reducing vulnerability to and losses from fire. This includes experiments, simulation, modeling, testing and producing standard reference data relating to fire causes and conditions. NIST frequently provides such services for CPSC.

CPSC has a long history of coordinating its work with that of these and other federal agencies. We have signed Memoranda of Understanding (MOU) with USFA and CDC, and sponsor contract studies at NIST. These agreements provide a framework for interagency cooperation and coordination.

For example, we periodically provide support to USFA through briefings on our fire-related projects, guest speakers at the National Fire Academy, and technical advice on fire hazards. USFA provides us with annual national fire-incident data, the results of their program activities related to fire protection and prevention, and suggestions on our project priority-setting activities.

## PERSPECTIVE & OUTLOOK

An important element in addressing fire deaths is the role of demographic factors and shifts within the population at risk. We attempt to keep these factors in perspective when considering strategies for reducing fire deaths.

Two main factors involve (1) the age distribution of the population, and (2) income and education levels. Older Americans and low-income/low-education households are at relatively higher risk of death from residential fires. As the trend toward higher median age and continued disparity in income and education become more prevalent, programs targeted to reduce fire deaths may become increasingly important. Thus, we consider this goal to be one that fits the needs of a changing society.

## EVALUATION SCHEDULE

Contributions to the goal of reducing fire deaths come from a wide range of consumer product-related activities, most of which individually account for relatively small numbers of fatal fires, and involve products with relatively long useful lives. Thus, progress toward the goal is incremental over the years. The completed evaluation on cigarette lighters (a product with a very short useful life) was performed only five years after the mandatory rule became effective. A realistic evaluation of a significant portion of fire programs, dealing with electrical and heating equipment fire deaths, could be initiated in 2008.

**REFERENCES**

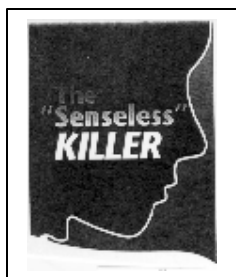
Harwood, B. and Hall, J. Jr., "Smoke Inhalation or Burns?" *Fire Journal*, May/June 1989, pp.29-34.

Mah, J., *1998 Residential Fire Loss Estimates*. U.S. Consumer Product

Safety Commission, Washington, DC, 2001.

Smith, L., and Mah, J., *Revised Residential Fire Loss Estimates*. U.S. Consumer Product Safety Commission, Washington, DC, 2002.





## KEEPING FAMILIES SAFE FROM CARBON MONOXIDE POISONINGS

**STRATEGIC GOAL: Reduce the rate of death from carbon monoxide poisoning by 20 percent from the 1999-2000 average by the year 2013.**

### THE HAZARD

Carbon monoxide (CO) is a poisonous gas that has no smell, color or taste -- truly a "senseless" killer. Burning any fuel, such as gas, oil, wood, or coal may produce this gas, so that any fuel-burning appliance is a potential source of CO poisoning.

The latest available data show that in 1999 and 2000 an average of 124 people died each year from unintentional CO poisoning-related incidents, excluding incidents involving auto exhaust and fires, at a societal cost of approximately \$620 million each year.

For a graph of CO death data and a discussion of issues related to setting the current goal, see Appendix C "CO Deaths," page 59.

For deaths that occurred in 1999 and afterwards, a new worldwide system of classifying deaths went into effect. This affected all the death certificates used by CPSC, including those for determining the number of CO poisoning deaths.

In addition, we instituted a new method of estimating the number of CO deaths associated with consumer products. Estimates of deaths from CO poisonings

associated with consumer products were markedly lower under these new methods than under the old.

We have set our goal based on the number of deaths estimated under the new method in 1999 and 2000. Although these numbers are lower than those under the old system, we are hopeful that our actions will contribute to a further reduction in deaths.

### REDUCING THE RISK

As detailed in the box on the next page, we have used a number of interventions to reduce these deaths, including: working with industry to develop of new products that have technology to protect consumers from CO poisoning, working with industry to develop a voluntary performance standard for CO alarms, and warning the public through information campaigns.

### SETTING THE STRATEGIC GOAL

To further reduce deaths from carbon monoxide poisoning, we set a goal of reducing the death rate by 20 percent: deaths from CO poisonings will be reduced from the 1999-2000 average of 4.5 deaths per 10

**CPSC Interventions**

- *Safety Standards*
  - Charcoal warning labels
  - Unvented gas space heaters
  - Blocked vent safety shutoffs for furnaces and boilers
  - CO alarms
  - Camping heaters
- *Recalls & Corrective Actions:*
  - Boilers
  - Camping heaters
  - CO Alarms
  - Fireplaces
  - Furnaces
  - Gas controls
  - Heaters
  - Propane refrigerators
  - Ranges
- *Safety Alerts*

million population to 3.6 deaths per 10 million by the year 2013. We believe that this is an aggressive goal, particularly since the number of fuel-burning consumer products grows each year and new products continue to enter the market.

Specifically, we recently identified engine-powered generators as an emerging product hazard. (Engine-powered generators are one of the products in the new product category “Engine-Powered Tools” discussed in Appendix C, page 59) Engine-powered generators generate electricity using gasoline- or liquid propane (LP) gas-driven engines. Deaths occur when these generators are used in confined spaces such as garages or basements, and the CO produced by the generator quickly accumulates to dangerous levels. Sales of these generators are expected to increase as consumers seek alternate sources of

electricity, especially for use during power outages.

National estimates showed an average of 13 deaths each year in association with engine-powered generators in 1999 and 2000. This was approximately 10 percent of all CO poisoning deaths in those years.

We initiated a new project to address the CO hazards posed by these generators. However, CPSC staff estimates it will take several years to determine the feasibility of potential safety devices and to incorporate effective ones into product designs. Until this can be accomplished, these products may account for a significant and potentially growing number of the fatal CO poisonings each year, and may prevent us from reaching our overall goal despite substantial reductions in other hazard areas.

Most of the decrease in the death rate from CO poisoning for the past 10 years has been due to the increased safety of products. In 2000, only 17 to 20 million American households were estimated to be equipped with at least one carbon monoxide alarm. Further decreases will depend to a greater extent on increased use of CO alarms and consumer awareness.

## STRATEGIES

CPSC will pursue two major approaches to further reduce CO poisoning deaths. We believe that these strategies will also help reduce injuries associated with carbon monoxide poisonings.

We will work to (1) improve or correct products to reduce the amount of CO emissions, and (2) promote the use of CO alarms in every American home.

Specifically, we will:

- Develop or strengthen voluntary standards for specific fuel-burning products.
- Encourage the development of more reliable CO alarms.
- Encourage the use of reliable CO alarms in residential dwellings in the United States.
- Continue recalls and corrective actions of products that present CO hazards.
- Continue public awareness by issuing public alerts to warn consumers about CO poisoning hazards and the need for regular maintenance of combustion appliances each year prior to the home-heating season.

## PERFORMANCE MEASURES

We will use the annual CO poisoning death rate per 10 million population as the primary performance measure to evaluate our strategic goal. We track product-related residential and recreational CO deaths annually. When appropriate, we will also estimate and report societal costs or savings.

CO poisoning death estimates are based on data from the National Center for Health Statistics (NCHS) and our Death Certificate File (death certificates for product-related hazards that we buy directly from the states). Population estimates for the United States are available from the U.S. Census Bureau, U.S. Department of Commerce. Societal costs include information from our Injury Cost Model and other sources with an assumed cost of \$5 million per statistical life, consistent with economic literature.

Note that because the processing of death data reported to NCHS and to CPSC through the states takes about three years to complete, we will not know whether we reach our goal for 2013 until 2016.

## OTHER ORGANIZATIONS WITH SIMILAR PROGRAMS

Carbon monoxide poisoning is associated with the use of household combustion appliances, boats, cars, gasoline-powered tools, and farm equipment -- a wide array of products whose jurisdiction is covered by several federal agencies. CPSC has the primary role in addressing consumer products that produce carbon monoxide hazards. However, the goal of reducing carbon monoxide deaths is one that is shared by other federal agencies as well as private sector and not-for-profit organizations. We work with the following agencies and organizations to increase the effectiveness of our efforts and to avoid duplication.

- American Gas Association
- American Lung Association
- American National Standards Institute
- Association of Home Appliance Manufacturers
- Canadian Standards Association
- U.S. Centers for Disease Control and Prevention
- U.S. Coast Guard
- Colorado Department of Public Health and the Environment
- Committee on Indoor Air Quality
- Consumer Federation of America
- U.S. Environmental Protection Agency
- U.S. Federal Emergency Management Agency

- Gas Appliance Manufacturers Association
- Gas Detection Industry Association
- Gas Research Institute
- National Association of State Fire Marshals
- National Electrical Manufacturers Association
- National Institute for Occupational Safety and Health, U.S. National Institutes of Health
- U.S. Occupational Safety and Health Administration
- State and local fire departments and associations
- Underwriters Laboratories Inc.

The effort to make the American public more aware of the hazards of carbon monoxide poisoning and the availability and use of CO alarms requires the participation of a large number of groups. Fire departments, gas utility companies, heating contractors, medical groups, alarm manufacturers, gas appliance manufacturers, voluntary standards organizations, federal, state, and local government agencies, building code organizations, and consumer groups -- all are, and must be, involved in helping to reduce the deaths and injuries from CO poisoning. We will continue to encourage involvement of all groups.

## KEY EXTERNAL FACTORS

Certain external conditions may arise over the strategic planning period that could influence the achievement of our strategic goal. They are as follows:

### Critical Emerging Hazards

Unforeseen emerging hazards may require the reallocation of staff resources that had originally been assigned to achieve

this strategic goal. New products or changes in consumer behavior may result in critical hazards that draw resources away from planned work.

### Weather-Related Consumer Behavior

Weather conditions impact consumers' purchase and use of CO alarms. Consumer attention to CO poisoning generally reaches a peak during the heating season, and manufacturers and retailers generally promote the purchase of CO alarms at that time because of news interest about CO poisonings. However, if heating season weather is unusually warm, sales tend to be lower, and the number of consumers purchasing and using CO alarms does not increase as rapidly as when the weather is more severe.

Weather conditions also can impact consumers' use of portable generators, cooking appliances, and heating equipment. Severe weather conditions that lead to power outages have often resulted in a higher-than-usual number of CO deaths and injuries due to an increased use of generators and portable appliances for cooking and heating.

Thus, weather conditions are an unpredictable influence on the number of carbon monoxide-related deaths.

### Other External Factors

Private industry testing of CO alarms in 1998 and 1999 led us to conduct our own testing of CO alarms that determined that the voluntary standard for CO alarms needed to be strengthened. This activity led to a cancellation in our plans to develop a proposal for the International Building Code to require installation of CO alarms in all new homes.

In 2001 CPSC staff demonstrated the feasibility of CO sensing technology to shut off a furnace if elevated levels of CO were produced. This testing was in support of previous recommendations CPSC staff made to amend the voluntary furnace standard to protect against CO poisoning from gas-fired furnaces. The industry has formed a working group to evaluate possible technology. If the industry rejects the CPSC staff's recommendation, this will negatively impact CPSC's efforts to reduce CO poisonings from consumer products.

The current trend of making houses more airtight may impact our ability to meet our goal. As houses become tighter they become more susceptible to buildup of CO because there is less leakage of outside air into the house, and the amount of air available for combustion can become restricted.

## RISK MANAGEMENT

Changes in management and internal agency operations and functions may affect the achievement of strategic goals generally, including the goal of reducing carbon monoxide poisoning deaths. We have, however, identified no particular risks associated with this goal.

## CROSS-CUTTING PROGRAMS

### Automotive CO Poisonings in the Home

CPSC does not have jurisdiction over hazards associated with automobiles. However, a significant number of unintentional CO poisonings in the home are the result of automobiles left running in attached garages. By encouraging the use of

CO alarms, CPSC will likely reduce the occurrence of these fatalities.

## PERSPECTIVE & OUTLOOK

### Annual CO Deaths

Reducing CO poisoning deaths probably cannot continue at the current rate. There likely is some number of CO poisoning deaths that cannot be prevented. However, at this point, there is no reliable way to predict what this baseline level is. This level will be identified when the data stabilize.

## EVALUATION SCHEDULE

CPSC will evaluate progress toward the strategic goal annually by continuing its current practice of publishing national estimates of unintentional non-fire-related CO deaths associated with consumer products.

In addition, an evaluation of CPSC's program for reducing non-fire-related CO deaths is currently scheduled for 2004.

## REFERENCES

Long, Kim and Saltzman, Lori, *Non Fire-Related Carbon Monoxide Incidents: Morbidity and Mortality Related to the Use of Household Appliances*. U.S. Consumer Product Safety Commission, Washington, DC, January 1995.

Mah, Jean, *Non-Fire Carbon Monoxide Deaths Associated with the Use of Consumer Products: 1998 Annual Estimates*. U.S. Consumer Product

Safety Commission, Washington, DC, 2001.

Jordan, Ronald, *Furnace Combustion Sensor Test Results*. U.S. Consumer Product Safety Commission, Washington, DC, 2001.

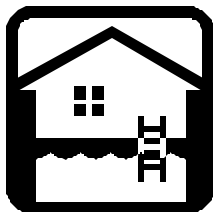
Buyer, Janet, *Interim Status Report on the Engine Driven Tool Project*. U.S. Consumer Product Safety Commission, Washington DC, September 2002.

Vagts, Susan, *Estimating Non-Fatal Carbon Monoxide Poisoning Injuries*. Memorandum to Donald Switzer. U.S. Consumer Product Safety Commission, Washington, DC, November 27, 2002.

Vagts, Susan, *Incidents, Deaths, and In-Depth Investigations Associated with Carbon Monoxide and Engine-Driven Tools, 1990-2002*. Memorandum to Janet Buyer. U.S. Consumer Product Safety Commission, Washington, DC, April 1, 2003.

Vagts, Susan, *Non-Fire Carbon Monoxide Deaths Associated with the Use of Consumer Products 1999 and 2000 Annual Estimates*. U.S. Consumer Product Safety Commission, Washington, DC, July 31, 2003.





## KEEPING CHILDREN SAFE FROM DROWNING

**STRATEGIC GOAL: Reduce the rate of swimming pool and other at-home drownings of children under 5 years old by 10 percent from the 1999-2000 average by the year 2013.**

Because of resource limitations, staff proposes deleting child drowning as a strategic goal in the 2006 Strategic Plan. Work in this area would continue at the project level. We would expand our public information efforts, such as partnerships with child safety organizations, to reduce child drownings.

### THE HAZARD

Annually, an average of 248 children younger than 5 years of age drowned in swimming pools nationwide in 1999-2000. Drowning is the second leading cause of death from unintentional injuries in this age group, after motor vehicle incidents. Most of these deaths involve swimming pools. Drowning in swimming pools occurs not just when people are outside or using the pool, but also when young children leave the house without a parent or caregiver realizing it.

In addition, an average of 167 children under 5 years of age drowned each year from other hazards in and around the home in 1999-2000. Many of these deaths involved common household products, such as bathtubs, 5-gallon buckets, toilets, spas, hot tubs, and landscape ponds.

For a graph of drowning death data and a discussion of issues related to setting the current goal, see Appendix D “Drowning Deaths,” page 61.

### REDUCING THE RISK

In past years, CPSC has undertaken a number of activities to reduce the frequency of drowning in swimming pools and other consumer products in and around the home. These included the following:

- Initiating a rulemaking proceeding to address drowning hazards associated with baby bath seats
- Evaluating hazards associated with pool/spa/hot tub covers
- Evaluating pool alarms
- Evaluating hazard scenarios associated with submersions of children under 5 in residential swimming pools
- Participating in voluntary standards activities related to products such as pools, pool covers, pool alarms, door alarms, spas, hot tubs, and 5-gallon buckets
- Proposing building code requirements for swimming pool barriers
- Publishing pool barrier guidelines
- Publishing pool/spa entrapment prevention guidelines
- Publishing annual press releases on pool drowning hazards

- Conducting a home drowning prevention campaign

These activities have contributed to the development of the standards and guidelines outlined in the box below.

#### **Safety Standards and Guidelines That Address Drowning Deaths**

Bath seats  
 Buckets, 5-gallon  
 Pool alarms  
 Door alarms  
 Slip-resistance of bathtubs  
 Residential pools  
 Residential spas/hot tubs  
 Safety barriers for pools, spas/hot tubs  
 Safety covers for pools, spas/hot tubs  
 Circulation systems for pools, spas/hot tubs  
 Suction fittings for pools, spas/hot tubs

The rate of pool drownings of children under 5 has been decreasing. An evaluation of pool drowning deaths shows that the rate of death was about 20 per million population in 1991 and about 16 per million in 1998 (the most recent year for which comparable data are available).

### **SETTING THE STRATEGIC GOAL**

To further reduce drowning deaths to children, CPSC set a goal of reducing the pool-drowning rate for children younger than 5 years by 10 percent. At 10 percent, the pool drowning rate would be reduced from 12.9 per million children under 5 years in 1999-2000 to 11.6 per million children in

2013, or a reduction of approximately 25 deaths per year.

In addition, the drowning rate from other at-home hazards will also be reduced by 10 percent, from about 8.7 per million children under 5 years in 1999-2000 to 7.8 per million in 2013, a reduction of approximately 17 deaths per year.

Both these goals together aim to reduce drownings in and around the home to children under age 5 by 42 deaths per year.

### **STRATEGIES**

There are a number of activities that we may undertake to further address drowning hazards. We expect that strategies aimed at reducing drowning deaths will also reduce the number of near drownings, which can result in severe damage to the brain and other organs. These strategies include:

- Conducting home drowning safety information campaigns to increase the awareness of caregivers and the community about drowning hazards in and around the home and how to correct them.
- Assessing the extent of adoption of model building codes with swimming pool/spa safety provisions in various jurisdictions. Working with state and local jurisdictions to adopt or strengthen swimming pool safety codes and consumer awareness, where needed.
- Assessing the extent of conformance to CPSC pool barrier recommendations and/or model building codes in locales that have adopted these requirements.



- Conducting a special study of the circumstances involved in pool and spa drowning deaths in areas that have adopted CPSC recommendations and/or model codes to evaluate the effectiveness of these requirements.
- Continuing efforts to evaluate the performance of safety devices such as alarms, covers, etc., and address deficiencies through voluntary standards activities.
- Conducting more research on barrier products. For example, what are the most common barrier products currently in use? Are these products being used properly (i.e., in place and functioning)? Are multiple barriers used together more effective than use of just one at a time? How effective are the new technology products—laser and infrared perimeter alarms, etc? How well do they work in home settings? From this research CPSC could revise the current guidelines on swimming pool barriers as appropriate.
- Continuing efforts to assess drain suction and entrapment hazards, and addressing them through voluntary standards activities.
- Continuing recalls or corrective actions of pool or bathing products that do not comply with safety standards or that are defective products and present a substantial product hazard.
- Continuing efforts to understand and address other drowning scenarios in and around the home.

## PERFORMANCE MEASURES

We will use drowning rates per million children in the under-5 population for pool drownings and for other at-home drownings as our performance measures to evaluate our strategic goal. We track these rates annually. The annual numbers of swimming pool-related drowning deaths and other at-home drownings are obtained from national mortality data from the National Center for Health Statistics (NCHS) and CPSC data. Estimates of the number of children under 5 years old in the United States population is available from U.S. Census Bureau, Department of Commerce.

## OTHER ORGANIZATIONS WITH SIMILAR PROGRAMS

We work closely with staff of other organizations in order to more efficiently address the safety of children, enhance the effectiveness of our efforts to achieve injury reduction goals, and avoid duplication of effort. Among these are:

- American Academy of Pediatrics
- American Red Cross
- American Society of Mechanical Engineers
- ASTM International (private standards-setting organization)
- American National Standards Institute
- Children's Safety Network
- Consumer Federation of America
- Fire protection and emergency medical services organizations.
- International Consumer Product Health and Safety Organization
- Juvenile Products Manufacturers Association
- National 4-H Foundation

- National Center for Injury Prevention and Control, U.S. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services (HHS)
- National Institute of Child Health and Human Development, National Institutes of Health, HHS
- National Spa and Pool Institute
- National Safe Kids Campaign
- Underwriters Laboratories, Inc.
- U.S. Health Resources and Services Administration, Maternal and Child Health Bureau, HHS

Cooperative and collaborative efforts with other organizations range from data collection to enforcement activities. Memoranda of Understanding have been developed with other organizations to share data and other information. Prominent among these organizations is the National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (CDC). CPSC and CDC share technical information, injury data and results of survey-related research.

We also work with a number of organizations, such as American Society of Mechanical Engineers, ASTM International, the American National Standards Institute, and the Juvenile Products Manufacturers Association, to provide technical expertise for voluntary standards and certification programs, as well as collaborating on publications for child safety. Other organizations, such as the Children's Safety Network, the Bureau of Maternal and Child Health, and the National 4H Foundation, distribute our safety materials to grassroots organizations and consumers. In support of these activities, our unique data gathering systems have proven to be invaluable tools for defining the nature and scope of product-related hazards.

As a federal health and safety regulatory agency, CPSC has the unique task of translating drowning mortality data and research into safety recommendations for consumers and, as necessary, mandatory and voluntary consumer product safety standards. Our development of swimming pool barrier guidelines is an important example of action taken to address a safety problem of concern to a broad spectrum of public and private organizations.

## KEY EXTERNAL FACTORS

Certain external conditions may arise over the strategic planning period that could influence the achievement of our strategic goal. They include:

- Ability to achieve full participation of local authorities in specific regions to assure sufficient cases for an adequate conformance survey or epidemiological study.
- Ability to affect adoption by local jurisdictions of model building codes that have been updated to include specifications intended to reduce the number of pool/home-related drownings.
- Availability of specific details about the circumstances involved in unwitnessed drowning incidents.
- Ability of CPSC to influence consumer behavior in matters of child supervision, drowning prevention, etc.

## RISK MANAGEMENT

Changes in management and internal agency operations and functions may affect

the achievement of strategic goals generally, including the goal of reducing drowning deaths to children. We have, however, identified no particular risks associated with this goal.

## CROSS-CUTTING PROGRAMS

Our strategic goal to reduce the frequency of childhood drowning is related to the Department of Health and Human Services' (HHS) goal to reduce the major threats to the health and well-being of Americans, including the related objective to reduce the incidence and consequences of injuries and violence in American society.

HHS, through the CDC, has chosen drowning reduction as one of its goals for Healthy People 2010, and supports state and local health departments, academic institutions, community-based organizations for applied research, intervention evaluation, training, and surveillance in injuries.

CDC's objective includes work outside our area of jurisdiction such as watercraft-related and non-consumer product-related drowning deaths in natural bodies of water. However, where our interests overlap, in areas such as drowning hazards associated with swimming pools and other products in the home, we will continue to work in cooperation and collaboration with CDC and numerous other organizations who share our interest in children's safety.

## PERSPECTIVE & OUTLOOK

Changes in the economic factors which influence the number of residential swimming pools, spas, hot tubs, and other bodies of water in and around the home may

affect our ability to meet our goal by influencing the exposure to the risk of drowning.

## EVALUATION SCHEDULE

After we have investigated various potential remedial strategies more fully and have chosen which ones we will actively pursue, we will be better able to determine a feasible evaluation schedule.

## REFERENCES

Hiser, Signe. *Estimates of Drowning Deaths and Near-Drowning Injuries in Swimming Pools for Children Under 5 Years of Age*. U.S. Consumer Product Safety Commission, Washington, DC, 2001.

*Guidelines for Entrapment Hazards: Making Pools and Spas Safer*. U.S. Consumer Product Safety Commission, Washington, DC, 1997.

*Safety Barriers for Home Pools*. U.S. Consumer Product Safety Commission, Washington, DC, 1994.

Sweet, Debra. *Fatality Information for the "In-Home Drowning Prevention Campaign"*. U.S. Consumer Product Safety Commission, Washington, DC, 2002.

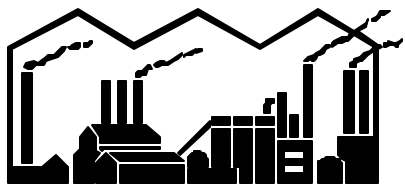
Sweet, Debra. *Methodology for Annual Drowning*. Memorandum to Jacqueline Elder, Office of Hazard Identification and Reduction, U.S. Consumer Product Safety Commission, Washington, DC, August 26, 2003.

Whitfield, Troy. *An Evaluation of Swimming Pool Alarms*. U.S. Consumer Product Safety Commission, Washington, DC, 2000.

**SERVICE QUALITY AND CUSTOMER SATISFACTION GOALS**



## THE QUALITY OF SERVICES TO INDUSTRY



**STRATEGIC GOAL: Maintain success with the timeliness and usefulness of the Fast-Track and Small Business Ombudsman programs for industry through 2010.**

### THE PROGRAM

Our Compliance program ensures that firms comply with the laws, regulations and standards that protect consumers from hazardous products. Manufacturers, importers, distributors and retailers must report to us if they obtain information that reasonably supports a conclusion that one of their products: (1) fails to comply with a safety standard or banning rule issued under the Consumer Product Safety Act; (2) contains a defect that could create a substantial product hazard; or (3) creates an unreasonable risk of serious injury or death.

To help firms comply, we provide guidance regarding reporting requirements, the applicability of individual regulations, testing requirements and current interpretations. When a violation of a safety standard is found or if a defective product is identified, we work cooperatively and quickly with industry to obtain correction of the violation or recall of the hazardous product, as appropriate.

### REDUCING THE RISK

We have two programs to assist industry in complying quickly with our regulations: the Fast-Track Product Recall program

#### CPSC Services

##### Guidance and Advice

- Reporting requirements
- Regulatory requirements
- Interpretations
- Applicability of individual regulations
- Corrective action plans
- Recall plans

##### Technical Review

(Fast-Track), and the Small Business Ombudsman program.

With the Fast-Track program, a firm that reports and recalls a product quickly will not be subject to a preliminary determination that the product presents a substantial product hazard. Advantages of this program to industry include reductions in paperwork, red tape, and possible legal expenses related to the recall of potentially defective products. A key advantage of this program to CPSC is the quick removal of hazardous products from consumers' hands.

In 1998, shortly after it was implemented, the Fast-Track program won several awards for innovation and excellence in government. As of mid-year 2003, over 750 firms have participated in the program, resulting in 1,200 corrective action

plans and involving over 136 million product units.

With the Small Business Ombudsman program, we help small businesspersons comply more easily with product safety guidelines and manufacture safer products. This program provides firms with a single point of contact within the agency, which expedites a clearly understandable response from our technical staff. As of mid-year 2003, we have helped about 1,850 small businesses that have called our ombudsman.

### SETTING THE STRATEGIC GOAL

**Timeliness.** The Fast-Track program was developed to streamline the process of recalls for firms who were willing and prepared to recall their products quickly. The principal feature of the program is a 20-business day criterion for implementing the first recall notice. CPSC and the firm recalling the product agree to complete the work necessary to implement the first recall notice, often a notification to retailers to stop sale of the product, within this 20-day time period. We set a strategic goal to maintain this timeliness standard at 95 percent or better through 2010.

For the Ombudsman program, we committed to responding to questions asked by small businesses about our requirements and regulations within three business days. The Ombudsman identifies the appropriate technical staff, coordinates CPSC's response, and works with the small business to assure their satisfaction with the process. We set a strategic goal to maintain this timeliness standard at 90 percent or better through 2010.

We track our timeliness for both programs and report these results annually.

Both programs met their timeliness standards in 2002 (see following table).

Timeliness				
Program	1999 Actual	2000 Actual	2001 Actual	2002 Actual
Fast-Track	95%	94%	95%	95%
Ombudsman	84%	81%	79%	99%

The Ombudsman program's timeliness of responses to inquiries was much higher in 2002 than in previous years. Part of this may be due to improved in-house reporting of quick-turnaround requests. Part may be a result of increased use of e-mail both by customers to submit inquiries to CPSC as well as by CPSC staff in responding.

**Usefulness.** Both the Fast-Track and Ombudsman programs are voluntary ones, and acceptance by industry is an important feature. CPSC set a strategic goal to maintain the usefulness of the Fast-Track and Ombudsman programs to industry at 90 percent or better with businesses that utilized these services. This goal was set at a high level that was acceptable to the Commission.

We will assess industry's response every two to three years, depending on the resources available. The results of a recent assessment showed that nearly all of the firms contacted strongly agreed or agreed that the programs should be continued (see table below).

Usefulness		
Program	1999 Actual	2001 Actual
Fast-Track	100%	93%
Ombudsman	100%	93%



## STRATEGIES

To provide quality services to firms reporting to us, we will maintain and adhere to a list of customer service standards for industry contacts. The standards aim to provide firms with:

- Courteous service by knowledgeable staff.
- Responses to written requests for interpretation within a fixed schedule of business days, depending on the level of complexity.
- Responses to Fast-Track reports and other queries within a fixed schedule of business days, depending on the level of complexity.
- Responses to small businesses who make an inquiry through the Office of the Ombudsman within a fixed schedule of business days, depending on the level of complexity.

## PERFORMANCE MEASURES

To determine the timeliness of the Fast-Track program, in-house tracking systems assess how quickly firms provided required information, how quickly firms' requests were acknowledged and the necessary technical reviews were completed, as well as the extent of, and reasons for, any delays. The Ombudsman program has a similar tracking system to measure how quickly we responded to requests from small businesses.

To assess industry's response to the Fast-Track and Ombudsman programs, we will conduct interviews periodically with participants in the Fast-Track program and with those small businesses that contacted CPSC during a specified time period.

## KEY EXTERNAL FACTORS

Certain external conditions may arise over the strategic goal period that could influence the achievement of our goals. They are:

**Critical Emerging Hazards.** We may have to modify our targets for the Fast-Track and Ombudsman programs in the future to deal with unforeseen emerging hazards. For example, in 2000, CPSC conducted an extensive investigation that led to the recall of 3.1 million dishwashers that presented a fire hazard. Work on this investigation and subsequent actions involved numerous staff over a short period of time, delaying other work. Several such efforts in a single year could have a significant impact on the achievement of this strategic goal.

**Other External Events.** Actions by Congress and the Small Business Administration could cause changes in the goals for the Small Business Ombudsman Program. In addition, changes in the volume of inquiries could affect the achievement of the program goals.

## EVALUATION SCHEDULE

Timeliness will be assessed yearly. Usefulness will be assessed every two to three years, depending on availability of resources.

## REFERENCES

*Recall Handbook: A Guide for Manufacturers, Importers, Distributors and Retailers on Reporting Under Sections 15 and 37 of the Consumer Product Safety Act and Section 102 of*

the Child Safety Protection Act and  
Preparing for, Initiating and  
Implementing Product Safety Recalls  
Including CPSC Fast-Track Product

Recall Program. Washington, DC: U.S.  
Consumer Product Safety Commission,  
May 1999.

## CUSTOMER SATISFACTION WITH CPSC SERVICES



**STRATEGIC GOAL: Sustain the high level of customer satisfaction with the CPSC web site, hotline, Clearinghouse, and State Partnership Program at 90 percent or better through the year 2010.**

### THE PROGRAM

In addition to our work reducing hazards associated with consumer products, we provide additional services to the public in the form of information services, including the agency's Internet web site, hotline, the National Injury Information Clearinghouse, the State Partners Program. These resources are used both to provide information to, and to receive information from, the public. Customer satisfaction with these services is vital if CPSC is to fulfill its mission.

Our web site ([www.cpsc.gov](http://www.cpsc.gov)) provides Internet access to CPSC resources, allowing the public to view information about recalled products, report unsafe product incidents, request information, and download safety information.

The hotline is a toll-free telephone service that allows consumers to report product complaints or product-related injuries, learn about recalls and safety hazards, and obtain safety publications.

The National Injury Information Clearinghouse provides data to the public in response to 3,300 requests each year. It also alerts manufacturers to potential hazards associated with their products, providing

#### CPSC Services

##### Web Site

- Publications
- Regulations
- Statistics
- Recall information
- Report unsafe products
- Report product-related injuries

##### Hotline

- Report unsafe products
- Report product-related injuries
- Product recall information
- Tips on buying safe products
- Tips on using products safely
- Safety publications

##### Clearinghouse

- Injury data
- Death data
- In-depth investigations

##### State Partners

- Injury and death data
- Product recall advice & information
- Training
- Speakers
- Outreach programs

them with consumer complaints, reported incidents and accident investigations involving their products.

Our State Partners Program, using limited CPSC funds and CPSC-developed safety information, brings product safety services to consumers through cooperative programs with state and local governments. The program extends our reach throughout the nation.

## REDUCING THE RISK

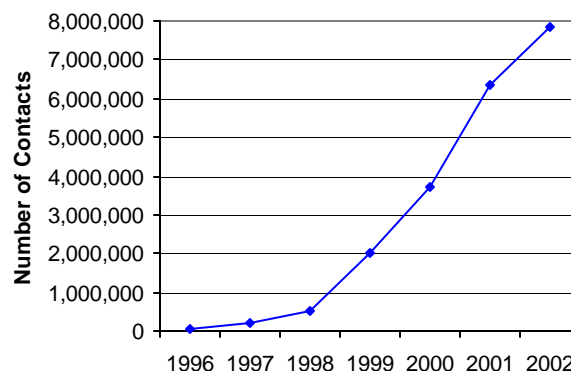
The satisfaction of customers (including consumers, industry, and state partners) with CPSC services is important to us. If consumers are satisfied with safety information they receive through the web site, hotline, and Clearinghouse, they will more likely obtain and use this information to protect themselves and their families. If our state partners are satisfied with CPSC's safety information and response to them, they are more likely to incorporate this safety information into their local ongoing programs, again protecting consumers from product-related injuries and deaths.

## SETTING THE STRATEGIC GOAL

**Web Site.** In the past our strategic goal focused on the number of contacts to our web site, which has increased dramatically over the years (see graph below). However, now that our web site and the Internet itself have matured, we want to shift the focus more towards customer satisfaction with our site.

We plan to begin conducting surveys of user satisfaction with our Web site to identify areas that could be improved. We

Web Site Contacts by Year



conducted an initial survey in 2003 to give us baseline data for the level of satisfaction with our Web site. In this survey approximately 96 percent of respondents indicated that they were satisfied or very satisfied in general with the CPSC Web site.

In attempting to benchmark this goal, we also investigated evaluations at other agencies. We were able to locate only two other Federal agencies that reported conducting customer satisfaction surveys for their Web sites: the Bureau of the Census, and the International Trade Administration (ITA), both in the Department of Commerce.

The Bureau of the Census reported 94 percent customer satisfaction in 1997, 69 percent in 2000, and 90 percent in 2001.

The ITA reported customer satisfaction levels for 2002 at 84.4 percent. For FY 2002 their target satisfaction rate was “greater than 50 percent.” For 2003, they set the target at 70 percent.

Because these agencies’ customers’ needs and expectations may be very different from those of CPSC’s customers, we are not sure that these satisfaction levels would be strictly comparable to CPSC’s. However, based on the Web site customer

satisfaction evaluations at these other agencies, and CPSC’s own baseline evaluation of customer satisfaction, we set a goal of 90 percent satisfaction with our Web site.

**Hotline, Clearinghouse, State Partners.** CPSC set a strategic goal to sustain the high level of customer satisfaction with the hotline and Clearinghouse and of the states with our State Partnership Program at 90 percent or better through the year 2010.

We set this goal based on recent evaluations of the three services showing customers and partners to be very satisfied with CPSC's services. Satisfaction levels ranged from 88 percent to 97 percent over the time period (see following table). These values compare very favorably with those we found from other comparable agencies that reported customer satisfaction levels ranging from 70 percent to 81 percent (see *CPSC Customer Satisfaction Surveys*, reference #2 in REFERENCES following this section).

Customer Satisfaction			
Program	1996 Actual	1999 Actual	2002 Actual
Hotline	97%	95%	91%
Clearinghouse	97%	95%	88%
State Partners Program	---	94%	96%

**STRATEGIES**

The two following strategies will be used to maintain or improve the level of customer satisfaction with the web site. Customers will be able to:

- Find information about recalls on our web site the day the recall is announced.

- Find copies of statistical studies, briefing packages, and other documents on our web site the day the documents become public.

To sustain the high level of customer satisfaction with the hotline, Clearinghouse, and State Partners Program, staff will maintain and adhere to a list of customer service standards. Customers, including consumers, industry, and state partners, will be able to:

- Speak to a knowledgeable and courteous staff person.
- Receive the most up-to-date safety information.
- Have a response to a request within a specified time, usually within one to five business days.
- Receive a return call or have a request acknowledged in a specified time, usually within one to two business days.
- Speak to a CPSC staff member in any of 12 languages.
- Have a consumer complaint recorded accurately and a copy mailed for verification within two business days.

**PERFORMANCE MEASURES**

We will rely primarily on two basic types of performance measures: in-house tracking systems will provide time-to-respond measures, and surveys will provide the percent of customers (consumers, industry, or state partners) satisfied with our services. Surveys may be telephone interviews, e-mail surveys, or mailed questionnaires.

## KEY EXTERNAL FACTORS

Certain external conditions may arise over the strategic goal period that could influence the achievement of our goals. They are:

**Changes Affecting State Partners Program.** The Governor of each state appoints state Designees. Each time there is an election, the state may or may not appoint someone who is actively involved in product safety.

## EVALUATION SCHEDULE

Timeliness will be assessed yearly using routine tracking reports. Surveys evaluating customer satisfaction will be conducted every two to three years depending on availability of resources.

## REFERENCES

*Meeting Our Customer Service Standards.* Office of Planning and Evaluation, U.S. Consumer Product Safety Commission, Washington, DC, November 1999.

*CPSC Customer Satisfaction Surveys: Hotline, Clearinghouse, State Partners.* Office of Planning and Evaluation, U.S. Consumer Product Safety Commission, Washington, DC, March 2003.

*CPSC Web Site Customer Satisfaction Survey.* Office of Planning and Evaluation, U.S. Consumer Product Safety Commission, Washington, DC, September 2003.

**CRITICAL MANAGEMENT INITIATIVE**





## CRITICAL MANAGEMENT INITIATIVE

**Strategic Goal: Improve the utility and quality of CPSC's data through 2009 by:**



- **Utility:** Developing and implementing a more systematic method to identify new strategic goal areas, hazard reduction projects, and remedial actions.
- **Quality:** Improving the quality of CPSC's data based on criteria such as accuracy, consistency, security and completeness.

### THE PROGRAM

Improvements in the overall utility and quality of CPSC data are necessary for the Commission to focus its limited resources effectively.

To improve the utility of the data, we will more systematically review and analyze death and injury data and identify areas where more information must be obtained in order to develop effective strategies to reduce deaths and injuries.

In addition, the quality of in-house databases that track CPSC's activities needs to be upgraded and better maintained. Failure to improve these basic operations could result in a reduction in our ability to analyze and prioritize product hazards.

**Data Utility.** Each year CPSC collects incident information involving consumer products: 8,700 death certificates, 360,000 hospital emergency room reports of injuries, 5,000 newsclips, and 10,000 other reports of

incidents involving consumer products. Incidents are screened on a daily basis and routinely summarized. Selected incident information is expanded by conducting follow-up investigations of individual incidents, either by telephone or through on-site visits. These follow-up investigations provide an opportunity to examine the interaction between the product involved in the incident, the environment in which the incident occurred, and the injured person.

While these methods have worked effectively in the past, increasingly limited resources require that we target agency efforts more systematically and prioritize our efforts. Staff plans to develop and implement a new data review system that will identify promising strategic goal areas and/or hazard reduction projects for future incorporation into our strategic planning process and daily operations.

CPSC plans to begin systematic reviews of death and injury data and associated cost data by hazard area. We plan to do this by

product grouping (heating, cooking, ventilating; general household appliances; nursery equipment; home workshop tools, etc.) beginning in 2004. We anticipate reviewing one product grouping per quarter, four per year.

We also plan to conduct special studies in areas identified by the strategic planning process, data reviews or other staff activity. These studies could include, for example, analyses of nursery products, powered workshop and yard equipment, mechanical hazards to seniors, and head injuries to adults. Finally, we will continue to screen all incoming data daily to identify products that may be associated with increasing numbers of injuries.

In addition, we will investigate, in partnership with other federal agencies, the possibility of developing a database related to the health effects of exposure to chemical and biological hazards associated with consumer products to help us identify products that might be hazardous.

*Data Quality* refers to the accuracy and reliability of data held within our computer systems: can we identify the source of the data, has the data been entered accurately, is it internally consistent and complete, is the same data used by all groups within the agency, is the data secure? While most of CPSC's data systems already meet these standards, some may not. To improve data quality in these areas, we will need to determine exactly what problems exist and find data quality tools, policies and processes to improve these systems.

CPSC plans to evaluate at least one major data system in 2004. We hope to identify remedial strategies and will seek to acquire needed software and/or hardware in 2005. We plan to implement changes

beginning in 2006. Evaluation of other data systems could begin as early as 2005, depending on availability of resources.

## STRATEGIES

There are a number of effective strategies for improving data utility and quality. They are:

- Conduct hazard overviews of death, injury and incident data.
- Conduct special studies such as those using telephone interviews and on-site investigations to determine the circumstances surrounding the injuries or deaths.
- Continue daily screening of all incoming data.
- Assess the quality of CPSC's internal databases.
- Benchmark data quality tools, policies and processes in other governmental and commercial organizations.
- Assess the strategies and effort required to integrate CPSC's databases.
- Define a plan for creating tools, policies and procedures for data quality control and quality assurance.
- Develop applications to centralize data processing and perform quality control checks.
- Develop standard operating procedures in each office toward achieving data quality.

## PERFORMANCE MEASURES

We expect to develop and implement a systematic hazard review system by 2004. We will measure the success of this new system through its identification of new

strategic goal areas, hazard reduction projects and/or remedial actions.

Currently, we plan to develop baseline data for improving the accuracy, consistency, security, and completeness of CPSC's data. The number of database errors, including omissions of relevant data, will measure quality of the data.

## SETTING THE STRATEGIC GOAL

Setting the target for data quality will be determined after baseline data is developed in 2004.

## KEY EXTERNAL FACTORS

Certain external conditions may arise over the strategic goal period that could influence the achievement of our strategic goal. They are:

**Technology.** Increasing complexity of computer systems and software may necessitate increasing resources to improve data quality. If these resources are not available, there may be a reduction in the quality of the data.

Increasing costs of implementing hardware and software may also necessitate increasing resources to improve data quality. If these resources are not available, there may be a reduction in the quality of the data.

**Congress.** CPSC has little or no discretion over projects mandated by the Congress. Unexpected Congressional mandates may divert resources from data quality and utility activities.

**Petitions.** Although CPSC can choose to accept or reject suggestions that are submitted by petition, staff resources are needed to evaluate a petition before the decision to accept or reject it can be made. Unanticipated petitions may divert resources from data quality and utility activities.

## CROSS-CUTTING PROGRAMS

Improvements in the utility of CPSC data will result in more systematic analyses of broad categories of death and injury data becoming available. These analyses will be useful for other Federal agencies and organizations outside CPSC that use our death and injury data.

## REFERENCES

GAO Report. *Consumer Product Safety Commission: Better Data Needed to Help Identify and Analyze Potential Hazards*. Report to the Chairmen, Committee on Commerce, Science and Transportation, U.S. Senate and the Committee on Commerce, House of Representatives, GAO/HEHS-97-147.

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**OTHER INFORMATION**



## Relationship between Goals in the Annual Performance Plan and the Strategic Plan

### Type, Nature, and Scope of the Annual Performance Goals

Every year we engage in a number of activities (e.g., voluntary or mandatory standards development, recalls) that enable us to make progress towards reaching our strategic goals. Staff categorizes these activities and sets annual goals for the number of activities in each category that we will complete by the end of the fiscal year.

For some activities, such as recalls and news releases, annual goals are characterized as estimates. While these estimates are based on the number and type of hazards identified in the past, the actual number of recalls, news releases, and other activities will vary depending on the product safety-related incidents that occur each year.

We will set annual goals for the number of:

- Rulemaking candidates prepared for Commission consideration;
- Recommendations to strengthen or develop voluntary safety standards;
- Hazard analyses and data collection activities completed;
- Technical feasibility studies performed;
- Compliance activities initiated including recalls and other corrective actions;
- Consumer information activities disseminated through CPSC's web site,

*Consumer Product Safety Review*, hotline, and other activities; and

- Customer service standards achieved with targeted levels of effort for the hotline, Clearinghouse, State Partners Program and services to industry.
- Plans developed to evaluate candidate systems, software and processes for data quality improvement;
- Benchmarking activities for data quality tools, policies and processes in other organizations;
- Hardware, software and process solutions identified and implemented to improve data quality.

### Relationship between Annual Performance Goals and the Strategic Goals

Our annual performance goals are conceptually linked to the strategic goals. We set annual goals for activities that staff believes will lead to reductions in injuries and deaths, produce quality services and customer satisfaction, and improve data utility and quality.

For example, staff set annual goals for the number of recommendations for new or improved safety standards for each hazard reduction strategic goal. We expect these recommendations will lead to safer products, either through improved product designs, product performance, or warning labels.

Our customer service/satisfaction strategic goals have associated annual goals based on standards, many of which we hold ourselves to daily, such as timeliness, usefulness and courtesy. To-date, these standards have led to high levels of customer satisfaction, as shown by results from customer service surveys.

For our data utility goal, we will set annual goals for the number of candidate hazard reduction projects and/or strategic goals to be identified by our new data review system.

For our new data quality strategic goal we first must develop a plan to identify criteria for selecting candidates for improvement, prioritize the candidates, and define the processes for improvement. Once the plan has been created, we can conduct evaluations of the data quality of the candidate systems, implement benchmark activities, and identify and implement data quality solutions. The planning, benchmarking, evaluation and implementation activities all lead to the strategic goal of improving the quality of CPSC's data.



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## Program Evaluations and the Strategic Plan

### Program Evaluations Used to Develop the Strategic Plan

Evaluations used to develop goals for this strategic plan were based both on statistical analyses of data and staff expertise.

Results-oriented goals were based on trends of injuries and deaths at both the product and hazard levels. Staff experts who evaluated the potential actions of the Commission and the effect of joint efforts with other organizations and industry set specific goals in each hazard area. They also made assumptions concerning the outcome of potential technical feasibility studies.

Customer service/satisfaction goals were based on information from surveys and tracking systems, as well as staff expertise as to what could be accomplished in a given time span.

### Future Program Evaluations

Results-oriented goals will have two types of evaluations: yearly tracking of injuries and deaths at the hazard level and evaluations of injury and death reductions associated with specific products at

appropriate time intervals. The timing for evaluating injury and death reductions depends, in part, on how long consumers keep specific products.

For example, some products, particularly inexpensive ones, have a short product life; the effect of Commission actions to improve replacement products can be evaluated more quickly. Other products have a much longer product life. Evaluations of injury or death reductions, in these cases, would appropriately be conducted when consumers are expected to have replaced a substantial proportion of older products with safer products. Estimates of this product replacement are derived from the agency's Product Population Model.

Customer service and satisfaction goals also will have two types of evaluations:

- (1) tracking of customer service standards and activities, and
- (2) surveys of consumers and industry.

Tracking will be evaluated annually, and surveys will be conducted every two to three years. A schedule of future evaluations is provided in Table 1 on the following page.

**Table 1**  
**Schedule of Evaluations**

Strategic Goals	Issues	General Scope	Procedures	
			Method	Time
<b>Hazards</b> Fire Carbon Monoxide Child Drowning	Reduce the rate of death	National estimates of deaths	1. Hazard Surveillance (NFIRS, NCHS)* 2. Evaluation of specific products; tracking before/after studies	1. Annually 2. As appropriate
<b>Quality of Services to Industry</b> Fast Track Ombudsman	1. Timeliness standards met 2. Usefulness standards met	1. Population of users 2. Random sample of users	1. Logs 2. Interviews; mail survey	1. Annually 2. Every 3 years
<b>Customer Satisfaction with CPSC Services</b> Web Site Hotline Clearinghouse State Partners	Satisfaction with CPSC's services	Random sample of users	Interviews; mail and e-mail surveys	Every 3 years
<b>Critical Management Initiative</b> Data Utility Data Quality	1. Identify potential hazard reduction projects and/or strategic goals 2. Accuracy, security and completeness of databases	1. Number of goals and projects 2. Selected in-house databases	1. Candidate goals, projects produced 2. Reduction in database errors, penetrations, etc.	1. Annually 2. As appropriate

\*National Fire Incident Reporting System (NFIRS),  
National Center for Health Statistics (NCHS).

## Appendix A

### CPSC Statutes

#### Background

When Congress created CPSC in 1973 through the Consumer Product Safety Act ("CPSA"), it transferred to CPSC the authority to administer several other statutes. The agency oversees five statutes in all and has issued regulations under most of them.

#### CPSA

15 U.S.C. §§ 2051-2084  
10/27/1972

This is CPSC's umbrella statute. It established the agency, defines its basic authority, and provides that when the CPSC finds an unreasonable risk of injury associated with a consumer product it can develop a standard to reduce or eliminate the risk. The CPSA also provides the authority to ban a product if there is no feasible standard, and it gives CPSC authority to pursue corrective actions and recalls for products that present a substantial product hazard. (Generally excluded from CPSA are food, drugs, cosmetics, medical devices, tobacco products, firearms and ammunition, motor vehicles, pesticides, aircraft, and boats.)

#### FHSA

15 U.S.C. §§ 1261-1277  
07/12/1960

The Federal Hazardous Substances Act ("FHSA") applies to hazardous household substances and requires that such substances be labeled as provided in the statute. This is the principal statute under which CPSC regulates children's products. The Commission can determine by regulation that a toy or children's article that presents an electrical, mechanical, or thermal hazard is a hazardous substance. The statute itself provides that a toy or children's article that is or contains a hazardous substance is automatically banned. This is the authority behind the prohibition against small parts on toys intended for children under 3 years of age. The Commission can issue regulations to ban other household hazardous substances if it finds that labeling would be inadequate to protect the public health and safety.

The Labeling of Hazardous Art Materials Act ("LHAMA"), 15 U.S.C. § 1277, is a 1988 amendment to the FHSA. It requires that producers or repackagers of art materials submit the product's formulation to a toxicologist who will determine if the art material presents any chronic health hazards. If so, the art material must be labeled in accordance with a standard mandated by Congress. The producer or repackager must submit to CPSC the criteria used to determine chronic toxicity and a list of those products that require chronic hazard labeling. All art materials must display a

conformance label indicating that a toxicologist has reviewed them.

The Child Safety Protection Act ("CSPA"), Pub. L. No. 103-267 (June 17, 1994) enacted in 1994 contains essentially three parts. First, it amended the FHSA to add labeling requirements for certain toys or games, balls, balloons, and marbles warning purchasers that these items present a choking hazard to young children (effective January 1, 1995). Second, it requires manufacturers, distributors, retailers and importers of these items to report to CPSC when they learn of certain choking incidents involving these products. Finally, the act required CPSC to review existing voluntary standards for bicycle helmets and develop a CPSC safety standard. On March 10, 1998, CPSC issued its final standard for bicycle helmets, effective March 10, 1999. All bicycle helmets manufactured after the 1999 date must comply with the Commission standard.

**PPPA**

15 U.S.C. §§ 1471-1476  
12/30/1970

The Poison Prevention Packaging Act ("PPPA") authorizes CPSC to issue requirements for special packaging (child-resistant packaging) for food, drugs, cosmetics, and hazardous household substances. The statute provides for exemptions in certain circumstances.

**FFA**

15 U.S.C. §§ 1191-1204  
06/30/1953

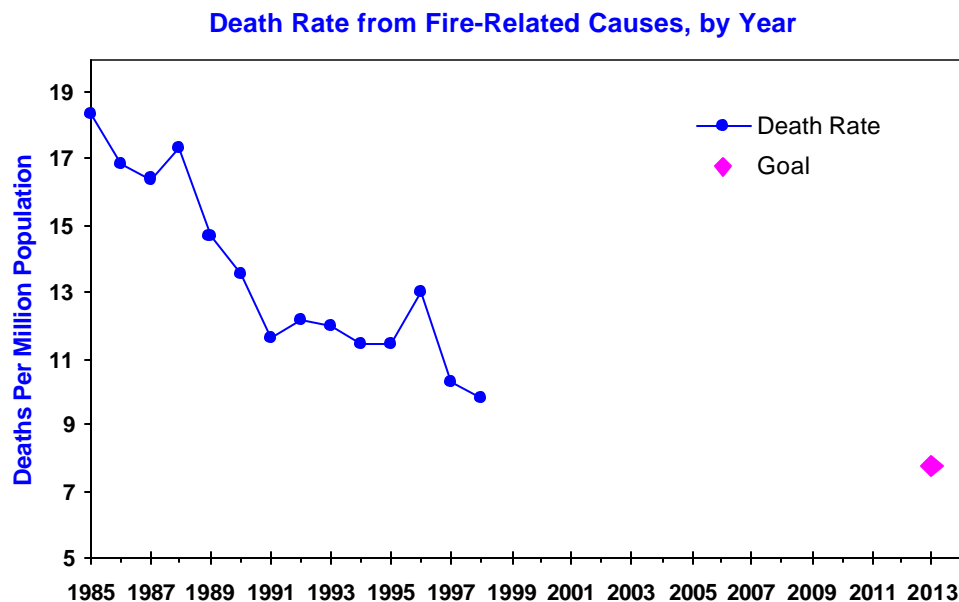
The Flammable Fabrics Act ("FFA") authorizes CPSC to issue standards for fabrics, related materials and products when standards are necessary to protect the public against the unreasonable risk of fire leading to death, personal injury or significant property damage. Examples of standards include the children's sleepwear standard and the standard for flammability of mattresses and mattress pads.

**RSA**

15 U.S.C. §§ 1211-1214  
08/02/1956

The Refrigerator Safety Act ("RSA") dates from 1956. It directed the Department of Commerce to issue a regulation requiring refrigerator doors be opened easily from the inside. Administration of the statute and regulation were transferred to CPSC in 1973.

## Appendix B Fire Deaths



The data used to determine the target for the fire goal are shown in the graph above. The estimated rates of death from fire-related causes for the years 1985 through 1998 are shown in circles. The goal is shown as a diamond.

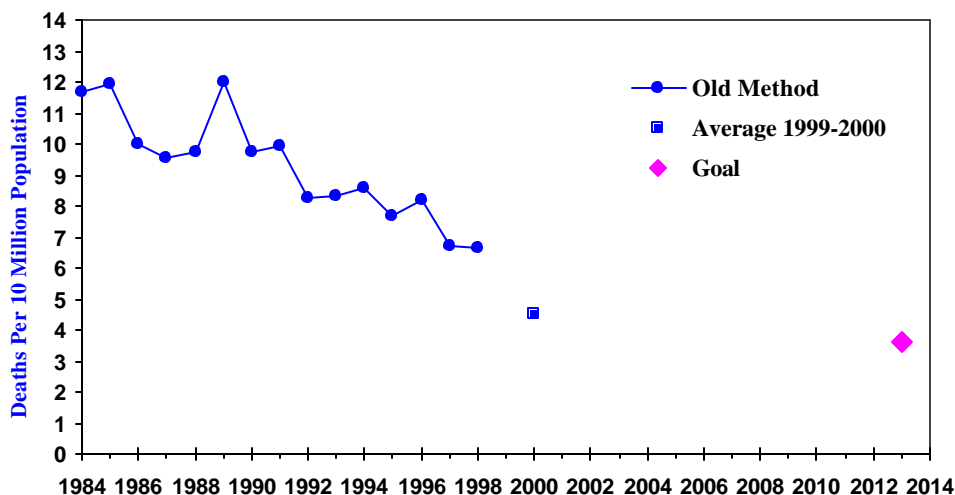
The estimated rate of death from fire-related causes was 9.8 deaths per million population in 1998, representing nearly 2,700 deaths. The goal is to reduce this rate by 20 percent by the year 2013, for a resultant death rate of 7.8 deaths per million population.

The data from 1998 are the most recent available data because a new revision of the National Fire Incident Reporting System (NFIRS), the nationwide system for coding information about fires, went into effect in 1999. Analyses of data from the new system are not yet complete.



## Appendix C CO Deaths

### Death Rate from CO Poisoning Associated with Consumer Products, by Year



The data used to determine the target for the CO poisoning goal are shown in the graph above. The estimated rates of death from CO poisoning associated with consumer products for the years 1984 through 1998 are shown in circles. The average estimated rate of death for the years 1999-2000 is shown as a square. The goal is shown as a triangle.

There was a marked decrease in the number and rate of death in 1999-2000 compared to 1998 and prior years. The estimated rate of carbon monoxide poisoning death associated with consumer products was 6.7 deaths per 10 million population in 1998, 4.0 deaths per 10 million in 1999, and 5.0 deaths per 10 million in 2000. The average rate of death for 1999-2000 was 4.5 deaths per 10 million. There were an estimated 180 CO poisoning deaths associated with consumer products in 1998, 109 in 1999, and 138 in 2000.

The discontinuity in rates may be at least partially the result of the use of a different method to estimate the number of deaths in 1999 and 2000 than was used in the previous years (old method in the graph above). This different method includes three changes: a change in the International Classification of Diseases (ICD), a change in methodology within CPSC, and inclusion of a new category of products in the estimate.

#### *ICD Change*

The World Health Organization publishes an International Classification of Diseases (ICD) which is used worldwide to classify deaths. For deaths that occurred in 1999 and afterwards, a new revision of this classification system went into effect, ICD-10. This new system uses different categories for causes of death than the system that had been in effect (ICD-9). These

changes have resulted in discontinuities in trend data for a number of causes of death (including influenza and pneumonia, septicemia, and Alzheimer's disease).<sup>1</sup>

#### *Methodology Change*

In addition, the change in the worldwide system necessitated some methodological changes in the way we estimate the number of deaths associated with consumer products, including CO poisoning. These methodology changes are detailed in a CPSC memorandum.<sup>2</sup> The new method does not require certain assumptions to be made about the data and, therefore, may be less likely to include out-of-scope cases.

#### *New Product Category*

Beginning with ICD-10 it became possible for CPSC to estimate deaths from CO poisonings associated with engine-powered tools. This category includes equipment such as generators, pumps, power washers and sprayers, garden tractors, lawn mowers, snowblowers and floor buffers. Previously, CO poisoning deaths associated with these tools had been classified with CO poisoning deaths from all types of engine-powered equipment. The majority of deaths classified within this code were automobile exhaust-related deaths. CPSC could not afford to purchase this large category of death certificates in order to obtain only a few that were actually within our jurisdiction. Therefore, CPSC could not generate estimates for this category.

Under the new system, engine-powered tools accounted for 12 percent (13 of 109) of CO poisoning deaths associated with consumer products in 1999, and 20 percent (27 of 138) in 2000. The inclusion of CO poisoning deaths associated with engine-powered tools increased the total estimate by an average of 20 deaths each year. Without this new group of products, the decrease in rates in 1999-2000 would have been even greater.

#### *Effect of Change*

We expect the general downward trend in the rate of death, due in part to past CPSC work that was observed under the old system to continue. However, if the new, lower numbers of deaths continue under the new system, it may be harder to address the remaining cases. As the large hazard categories are addressed and the absolute number of deaths become lower and lower, we will be left with more idiosyncratic cases, with deaths scattered across a range of hazard patterns with no unifying addressable hazard patterns. We feel that we have not yet reached this point, although the lower rates under the new system may indicate that we are closer to this point than previously thought.

As we obtain more data under the new system, we will reconsider our target and adjust it as appropriate.

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<sup>1</sup> Anderson R, Minino A, Hoyert D, Rosenberg H. *Comparability of Cause of Death Between ICD-9 and ICD-10: Preliminary Estimates*. National Vital Statistics Report: Vol 49, no.2. Hyattsville, MD: National Center for Health Statistics. 2001.

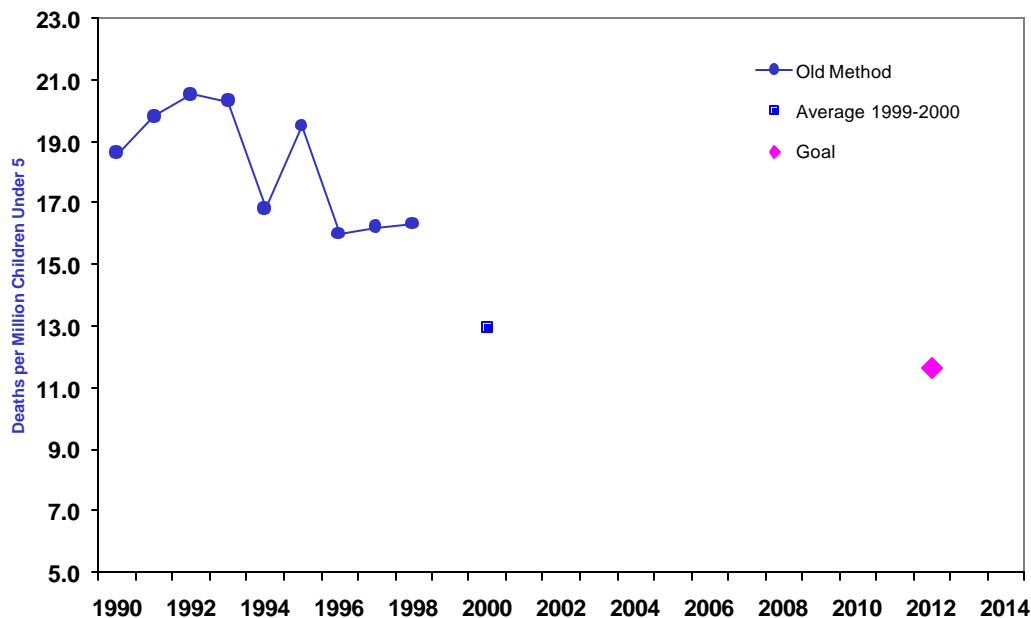
<sup>2</sup> Vagts, Susan. *Non-Fire Carbon Monoxide Deaths Associated with the Use of Consumer Products 1999 and 2000 Annual Estimates*, U.S. Consumer Product Safety Commission, Washington, DC, July 31, 2003.

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## Appendix D Drowning Deaths

Death Rate to Children Under 5 Years  
from Swimming Pool Drowning\*



\*Trend data not available for other at-home drownings.

Because of resource limitations, staff proposes deleting child drowning as a strategic goal in the 2006 Strategic Plan. Work in this area would continue at the project level. We would expand our public information efforts, such as partnerships with child safety organizations, to reduce child drownings.

### *Swimming Pool Drownings*

The data used to determine the goal for reducing swimming pool drownings of children under 5 years of age are shown in the graph above. The rates of death to children under 5 years of age from pool drownings for 1991 through 1998 are shown in circles. The average rate of death from pool drownings for the years 1999-2000 is shown a square. The swimming pool drowning goal is shown as a diamond.

The rate of pool drownings for children under 5 was 16.3 per million children in 1998, in 1999 it was 12.6, and in 2000 it was 13.3. The 1999-2000 average rate was 12.9. The 2013 goal was set at a 10 percent reduction from the 1999-2000 average for a rate of 11.6.

From 1990 through 1998, there were an estimated 350 swimming pool drownings to children under age 5 each year each year. In 1999, there were 241 swimming pool drowning deaths, in 2000 there were 255. This is a marked decrease in the number and rate of pool drowning deaths in 1999 and 2000 compared to 1998 and prior years.

The discontinuity in the numbers and rates of pool drownings may be at least partially the result of the use of a different method to determine the number of deaths in 1999 and 2000 than was used in the previous years (“Old Method” in the above graph). The new method includes two changes: a change in the International Classification of Diseases (ICD), and a resultant change in methodology within CPSC.

The World Health Organization publishes the ICD that is used worldwide to classify deaths. For deaths that occurred in 1999 and afterwards, a new revision of this classification system (ICD-10) went into effect. This new system now separates pool drowning deaths from other drowning deaths (such as drownings in lakes, streams, etc.), whereas the prior system (ICD-9) did not. As a result we can now actually *count* the number of pool drowning deaths, rather than *estimating* it from several different sources, as we had to do previously. Details of this new method are found in a CPSC memorandum<sup>1</sup>.

#### *Other At-Home Drownings*

Beginning with ICD-10 it also became possible for CPSC to count the number of drowning deaths associated with products in the home other than swimming pools, such as bathtubs, toilets, spas, hot tubs, landscape ponds, etc.

In 1999 there were 163 such deaths to children under 5, for a corresponding rate of 8.5 deaths per 10 million children (data not shown on graph). In 2000, there were 170 deaths, for a rate of 8.8 per 10 million children. The 2013 target was set at 7.8 per 10 million children, a 10 percent reduction from the 1999-2000 average rate of 8.7.

#### *Reductions in Deaths*

If the targets for reducing drownings are met, pool drownings would be reduced by approximately 25 deaths per year, and other at-home drownings would be reduced by about 17 deaths per year, for a total reduction of approximately 42 deaths per year.

As we obtain more data under the new system, we will reconsider our target and adjust it as appropriate.

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<sup>1</sup> Sweet, Debra. *Methodology for Annual Drowning Memorandum*, Memorandum to Jacqueline Elder, Office of Hazard Identification and Reduction, U.S. Consumer Product Safety Commission, Washington, DC, July 31, 2003.