U.S. Consumer Product Safety Commission



New Actions to Reduce Consumer Product-Related Deaths and Injuries to Minority Children

Response to Recommendations Contained in the U.S. Government Accountability Office (GAO) Report, Consumer Product Safety Commission: Better Data Collection and Assessment of Consumer Information Efforts
Could Help Protect Minority Children (August 5, 2009)

Report to Congress
October 2009

1. Introduction

Section 107 of the Consumer Product Safety Improvement Act of 2008 (CPSIA) required the U.S. Government Accountability Office (GAO) to conduct a study assessing disparities in the risks and incidence of preventable injuries and deaths among certain racial minority children. Specifically, section 107 directed the GAO to examine racial disparities in the rates of preventable injuries and deaths for suffocation, poisoning, and drowning, including those associated with cribs, mattresses and bedding, swimming pools and spas, and toys and other children's products.

The GAO completed its study and issued a final report of its findings, Consumer Product Safety Commission: Better Data Collection and Assessment of Consumer Information Efforts Could Help Protect Minority Children, on August 5, 2009. In addition to reviewing what is known about the relative incidence of preventable injuries and deaths among minority children associated with products intended for children's use, GAO examined what actions the U.S. Consumer Product Safety Commission (CPSC) has taken through its public information and education initiatives to minimize these injuries and deaths.

As a result of its study, GAO made two recommendations for CPSC action. The first recommendation asked CPSC to enhance data collection to better understand the relative risk of product-related injury among minority and nonminority children. The second recommendation called for further development of safety messages targeted at racial and ethnic groups at highest risk of injury from certain products.

CPSC is submitting this report to Congress to outline the activities that the Commission is undertaking to address the recommendations in the GAO report. Under the requirements of 31 U.S.C. § 720, the head of a federal agency must submit a written statement of the actions taken on GAO's recommendations to (i) the Senate Committee on Homeland Security and Governmental Affairs and the House Committee on Oversight and Government Reform not later than 60 calendar days from the date of the report, and (ii) the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 calendar days after that date.

GAO Recommendation: Enhanced Data Collection

The recommendations in the GAO report indicated a need for better collection of data on the factors that may contribute to differences in the incidence of injury for consumer products used by minority children. Specifically, GAO recommended:

✓ To better understand the relative risk of product-related injury among minority and nonminority children, the Commission, in consultation with the U.S. Department of Health and Human Services (HHS), should develop and implement cost-effective means of improving CPSC's data collection on factors that may contribute to differences in the incidence of injury and death related to specific types of consumer products, including race, ethnicity, and other patient characteristics. For example, steps CPSC could consider include improving the NEISS [National Electronic Injury Surveillance System] racial and ethnic classification system; working with NEISS hospitals to improve collection of data on patient race and ethnicity; and leveraging related data collection efforts, such as those sponsored by the Maternal and Child Health Bureau, the National Center for Health Statistics, or the National Institutes of Health.

2.1. CPSC's Current Data Collection Systems

CPSC collects information about product-related deaths and injuries through several data systems: Injury or Potential Injury Incidents (IPII), Death Certificates (DTHS), as well as the National Electronic Injury Surveillance System (NEISS).

Race and ethnicity are routinely reported on death certificates and included in reports from medical examiners. Hotline, Internet, and other complaints collected by CPSC do not routinely collect race and ethnicity data. Currently NEISS is the only CPSC database capable of producing statistically-based national estimates of emergency department-treated injuries associated with the consumer products within its jurisdiction. Therefore, statistical analysis of race and ethnicity is limited to NEISS.

Injury or Potential Injury Incidents (IPII)

IPII is a CPSC database containing reports of injuries or potential injuries made to the Commission. These reports come from news clips (about 7,400), Medical Examiners and Coroners Alert Program (MECAP) reports (4,600 reports), consumer complaints received by mail or through CPSC's telephone hotline or Web site, letters from lawyers, and similar sources (14,300 reports). Records in the IPII database do not constitute a statistical sample. Therefore, the incidents do not support national estimates of consumer product-related events. The reports are analyzed to characterize hazard patterns, to suggest emerging hazards, and to develop and implement corrective actions plans (or "recalls").

Death Certificates (DTHS)

CPSC purchases, reviews, and processes about 8,000 death certificates annually from all 50 states, New York City, the District of Columbia, and some territories. Certificates in E-codes (based on the World Health Organization's International Classification of Diseases ICD-10

system) that have a high probability of consumer involvement are purchased. These are then examined for product involvement before being entered into CPSC's death certificate database. Current death certificate data, however, constitute neither a statistical sample nor a complete count of product-related deaths. Therefore, these data are a minimal count of deaths. For this reason, CPSC uses this information as a baseline of deaths and for assigning in-depth investigations.

National Electronic Injury Surveillance System (NEISS)

For more than 30 years, the U.S. Consumer Product Safety Commission has operated a statistically valid injury surveillance and follow-back system known as the National Electronic Injury Surveillance System (NEISS). The primary purpose of NEISS is to provide timely data on consumer product-related injuries occurring in the U.S. CPSC receives about 360,000 product-related cases from NEISS each year. In 2000, CPSC initiated an expansion of the system to collect data on all trauma-related injuries. With the expansion, NEISS is an important public health research tool, not just for CPSC but for users throughout the U.S. and around the world. Several foreign governments have modeled their national injury data collection systems after CPSC's system.

What is the source of NEISS data?

NEISS injury data are gathered from the emergency departments of approximately 100 hospitals selected as a probability sample of all 5,300+ U.S. hospitals with emergency departments. The current NEISS sample of hospitals is grouped into five strata, four representing hospital emergency departments of differing sizes and a fifth representing emergency departments from children's hospitals. The system's foundation rests on emergency department surveillance data, but the system also has the flexibility to gather additional data at either the surveillance or the investigation level.

Surveillance data enable CPSC analysts to make timely national estimates of the number of injuries associated with (although not necessarily caused by) specific consumer products. These data also provide evidence of the need for further study of particular products. Subsequent follow-back studies yield important clues about the causes of injuries and potential methods to address those injuries.

Information gathered from NEISS, together with data from other CPSC sources, not only guides the Commission in setting priorities for further study but also may provide the Commission with evidence of the need for development of product safety standards, public awareness campaigns, and, to a lesser extent, product recalls.

How does NEISS work?

The data collection process begins when a patient is admitted to the emergency department (ED) of a NEISS hospital. An ED staff member elicits critical information as to how the injury occurred and enters that information in the patient's medical record. At the end of the day, a NEISS hospital coordinator reviews all ED records for the day, selecting those that

meet the criteria for inclusion in NEISS. The NEISS coordinator abstracts pertinent data from the selected ED record and transcribes it in coded form.

Identifying the consumer product related to an injury is crucial for CPSC. The NEISS coordinator assigns a product code from an alphabetical listing of hundreds of products and recreational activities, being as specific as the data allow. For example, if a lawn mower were involved in an injury, the coordinator would use a different product code for a walkbehind mower than for a riding mower. If the ED record contains additional product detail, the coordinator includes that in a line or two of narrative text (e.g., gasoline-powered rotary mower). The victim's age, gender, injury diagnosis, body parts affected, and incident locale are among other data variables that are coded. A brief narrative description of the incident is also included.

Once the abstracting and coding are completed, the NEISS coordinator enters the data for the day's NEISS injury cases into a personal computer (PC) provided by CPSC. As the coordinator keys in data, CPSC-designed software interactively edits the data, requiring that all fields be filled in and allowing only acceptable entries. Following completion of data entry at the hospital, the data are sent via the Internet. During the early morning hours, a PC in the CPSC Washington office polls each NEISS hospital and collects the newly entered data. After undergoing a second computer editing process, acceptable cases are automatically incorporated into the Commission's permanent NEISS database. The data are available immediately for further review.

The CPSC analytical process begins on the same morning the data are collected. Analysts process each case, screening each case for a potential emerging hazard and checking items for quality control purposes. It is important to note that manufacturer or brand names of products involved in injury incidents are seldom included in ED reports. Therefore, NEISS is not a reliable source of the manufacturer data that would be needed to support compliance investigations for corrective actions, such as recalls.

How are NEISS data used?

Each year, NEISS supplies information on over 360,000 product-related cases to CPSC. Because NEISS is a probability sample of hospital emergency departments, CPSC staff uses NEISS data to produce national estimates of the total number of product-related injuries treated in U.S. hospital emergency departments. NEISS data are also used to produce national estimates of injuries associated with specific products. For example, CPSC staff produces annual reports of injuries for several product categories including toys, nursery equipment, pediatric poisonings, and pool and spa submersions.

For some incidents identified at the NEISS surveillance level, follow-back investigations are conducted through telephone and on-site interviews with the patient or the patient's relative. Investigation reports provide important information about the likely causes of the incident, including the interaction among person, product, and environment. CPSC staff uses this information to classify incidents by hazard pattern, to provide insight into the types of actions that have the potential to reduce or eliminate the hazards, to identify defective products, and to evaluate the effectiveness of safety standards.

2.2. Improving CPSC's Data Collection Systems

SaferProducts.gov – a public database

The CPSIA requires CPSC to implement a publicly accessible, searchable database of consumer product incident reports. To meet the requirement for a public database, CPSC is planning to build a Web portal tentatively named SaferProducts.gov (working name only – final still to be determined), which will be a single, central location where consumers can go to report product safety incidents, and to search for prior incidents and recalls on products they own or may be considering for purchase. In conjunction with the Web site launch, CPSC will conduct a public awareness campaign to raise awareness of SaferProducts.gov.

CPSC also intends to integrate the information collection through the public database into a larger, information technology modernization initiative that will connect this data with data technology to "mine" the data for new emerging hazards. As this upgrade takes shape, the Commission will explore ways in which the portal could voluntarily accept racial and ethnic information.

Enhancements to IPII Data Collection

For the consumer complaints received through CPSC's telephone hotline or Web site, CPSC staff will investigate ways to collect minority data. While not statistically representative, such data may still be useful in identifying strategies to reduce injuries involving minority children.

Enhancements to NEISS Data Collection

In response to the recommendation from GAO, CPSC is undertaking a number of activities that should improve data collection for future analyses. These improvements will provide information on the specific factors that may contribute to differences in the incidence of injury for consumer products used by minorities.

Racial and ethnic classification system

The software for collecting NEISS data currently includes two variables that capture race and ethnicity: RACE and RACEOTH. For the RACE variable, the NEISS coder may select one of the following:

- White
- Black
- Other
- Not stated

The RACEOTH variable is a free text field where a NEISS coder can either enter a response or select one of the following:

- Asian
- Native American
- Hispanic
- Unknown

CPSC staff will modify the NEISS data collection software to align with the Office of Management and Budget standards for maintaining, collecting, and presenting federal data on race. Specifically, the RACE variable will be modified so that the NEISS coder may select from among the following:

- White
- Black or African-American
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- Other
- Not Stated

The free text field, RACEOTH, will continue to be used to report ethnicity. The NEISS coder will have the option to enter any stated (or multiple) races with which the individual identifies himself/herself or to select one of the following:

- Hispanic or Latino
- Not Hispanic or Latino

NEISS data are analyzed by calendar year. So that the data are consistent for the current year, these software modifications will be implemented at the start of the next calendar year, January 1, 2010.

NEISS data quality

As part of CPSC's continuous efforts to maintain the quality of the NEISS data, on-site evaluations and/or training are conducted at the NEISS hospitals annually. The major focus of these on-site evaluations is to review sets of emergency department charts and compare the information from the charts to what was entered in the NEISS, and to assess the completeness and accuracy of the NEISS reporting. In addition, as necessary and if possible, discussions or presentations are given to emergency department and hospital administration staff to stress the importance of the data collected in the NEISS. In the future – after the software modifications for data collection on race and ethnicity have been completed – on-site evaluations will include, when possible, materials on the importance of collecting standardized race and ethnicity data in the hospital emergency department charts. On the very rare occasion when hospitals modify what information is captured on their charts, CPSC will encourage the hospital to incorporate standardized collection of race and ethnicity.

Follow-back interviews

CPSC staff is developing new questionnaires with a core set of demographic questions, which will be included in all telephone follow-back interviews assigned from NEISS data. Approximately 1,000 interviews are conducted annually for various product-related injuries of interest such as those related to television tip-over, falls from cribs, gas generator carbon monoxide poisoning, fireworks, etc. While the focus of these follow-back interviews is to gather more information on the product involved and the injury scenario, additional demographic information such as race and ethnicity can be collected. As new questionnaires are developed, these core demographic questions will be included. A pilot questionnaire testing the demographic questions was conducted in August-September 2009 and the results will be available later in 2009.

Leveraging related data collection efforts

The GAO report also recommended that CPSC leverage other federal injury data collection efforts, such as the U.S. Department of Health and Human Services Maternal and Child Health Bureau (MCHB) Child Death Review Case Reporting Systems. CPSC has had past interagency agreements with MCHB to collect information in the NEISS that was of interest to them in conducting special studies.

Following the GAO report, CPSC staff has contacted MCHB staff with the goal of increasing data-sharing activities. To that end, CPSC staff had an introductory meeting with MCHB on September 28, 2009, with the objective of gaining access to the data from their death review system.

CPSC staff will also explore other possible data sources (e.g., National Center for Health Statistics mortality data with narratives) to determine if it would be feasible to gather consumer product-related death and injury data involving minority children.

As the race and ethnicity data that CPSC collects improves, staff will use the data to develop safety messages targeted to at-risk populations. In particular, staff will review data for preventable injuries and deaths for suffocation, poisoning, and drowning, including those associated with cribs, mattresses and bedding, swimming pools and spas, and toys and other children's products.

3. GAO Recommendation: Targeted Safety Messages

The recommendations in the GAO report indicated a need to improve consumer information efforts targeted to minority and underserved communities. Specifically, GAO recommended:

✓ To better understand the relative risk of product-related injury among minority and nonminority children and to improve the effectiveness of consumer information efforts, the Commission should develop and implement cost-effective ways to enhance and assess the likelihood that CPSC's safety messages are received and implemented by all the intended audiences. For example, CPSC could consider convening groups of consumers or Neighborhood Safety Network members to advise on the design and implementation of

campaigns targeted to specific communities, surveying NSN members, establishing metrics to measure NSN's success, and evaluating the effectiveness of information campaigns targeted to the racial and ethnic groups at highest risk of drowning as part of its implementation of the Virginia Graeme Baker Pool and Spa Safety Act.

3.1. CPSC's Safety Messages

Current outreach efforts

Reaching consumers with safety information is both a priority and a challenge. Currently, CPSC disseminates its safety messages to minority and underserved communities through a wide variety of approaches including media outlets such as television, radio, print, CPSC's Web site, and programs such as the Neighborhood Safety Network, and the Drive to 1 Million Campaign (an initiative to sign up at least one million consumers to receive life-saving information electronically through CPSC's e-mail notification project). Most of CPSC's printed materials (brochures, posters, handbooks, etc.) are also available in electronic format, and many of our materials have been translated into Spanish using common Spanish translations (for understandability among the widest Hispanic population). Our hotline, a toll-free service that allows consumers to report product complaints or product-related injuries, learn about recalls and safety hazards, and obtain safety publications, is available in multiple languages.

On September 22, 2009, CPSC launched "CPSC 2.0" – a comprehensive social networking initiative that will make CPSC's safety information more accessible to consumers. CPSC 2.0 utilizes a variety of technologies and social media sites (Youtube, Flickr, and Twitter), as well as a blog called *OnSafety*, to expand our reach to millions of families. CPSC believes that safety improvements can often be achieved through education and is using every available technology to keep Americans informed. Home computers used for social networking may be less available to disadvantaged communities who cannot afford them, but they are often available through libraries and schools. As the number of minorities that engage in social networking increases, our online outreach will include those communities.

A major component of CPSC minority outreach efforts is developing information and programs in Spanish for the Hispanic community, which is the largest minority population in the U.S. This minority group makes up 15.1 percent of the U.S. population; and in 56 percent of Hispanic households, Spanish is the first language (U.S. Census Bureau, Facts for Features, July 2007). CPSC has a Spanish-speaking spokesperson who has participated regularly in a morning show that reaches over 600,000 Hispanic viewers, and CPSC staff has participated in dozens of interviews with radio stations and local TV stations.

Continuing CPSC initiatives

The Neighborhood Safety Network (NSN) is CPSC's grassroots outreach program that provides timely life-saving information to approximately 5,500 organizations and individuals who, in turn, share the information with underserved consumers who might otherwise never hear or receive the information from CPSC. CPSC has a variety of publications, posters, checklists, and tools that can be downloaded for free and used by members to create safety programs specific to the needs of their communities.

CPSC staff plans activities to increase the number of social service and corporate members within NSN and tailor safety messages to specific segments of the NSN membership. The latter approach will ensure that a specific audience is receiving the appropriate and necessary messages.

In 2010, CPSC staff will initiate a telephone or online survey for Neighborhood Safety Network members. We will seek information regarding who we are reaching with our safety messages, with a particular emphasis on identifying and surveying members who reach racial minorities with information on child safety issues. We will also ask those groups about the effectiveness of our messages. For example, we will seek to determine whether consumers are changing their behavior in response to the information they are receiving from CPSC.

3.2. New CPSC Safety Message Initiatives: Expanding Our Reach and Effectiveness

In 2010, CPSC plans to target safety messages to minority and disadvantaged communities through several activities: a Minority Outreach Tour, a community-based outreach initiative, launch of "SaferProducts.gov" (working name only – final still to be determined), and a drowning prevention campaign. These activities were developed using key practices for planning effective education/outreach campaigns, taking into consideration such factors as target audiences, clear messaging, identifying credible messengers, and utilizing a mix of media methods.

Minority Outreach Tour

CPSC will lead a "Minority Outreach Tour" to increase awareness of consumer product safety in targeted markets. Locations will be selected to maximize reach to multiple populations, and programs may be developed with sponsorship from local and corporate organizations. The Minority Outreach Tour will provide safety messaging in large community settings (such as fairs or festivals) and will be aimed at attracting attention in major cities with highly diverse populations [e.g., Miami (Hispanic), Detroit (African-American), various Asian communities]. This is expected to be an ongoing effort and would be launched in either spring or summer of 2010.

CPSC will assess its effectiveness in reaching target audiences with its safety messages by using the following information:

- · Media audience figures (print, radio, and TV)
- · Number of Drive to 1 Million registrations during key outreach events
- · "Minority Outreach Tour" on-site surveys (human intelligence)
- · Publications disseminated at events
- · New NSN members
- · Increase in number of Spanish-speaking callers to the hotline

Community-based outreach initiative

CPSC staff plans to increase relationship development with grassroots organizations that target diverse populations. CPSC will present or exhibit at national and local conferences/events with community and government leaders including the National Urban League, Blacks in Government, the National Association for the Advancement of Colored People, the Young Men's Christian Association, the National Council of La Raza, and other social service organizations. By reaching out to trusted, community-based organizations, CPSC's message may be better received. This will be an ongoing activity.

Targeted outreach on "SaferProducts.gov"

In conjunction with the launch of CPSC's new Web site, SaferProducts.gov, CPSC will conduct a public awareness campaign to raise awareness the Web site. The public awareness campaign will utilize different media and multi-channel approaches to ensure necessary repetition and reinforcement of campaign messages. CPSC plans targeted outreach to various underserved populations. For example, in addition to channels that are currently effective for reaching CPSC's target audiences, such as word of mouth and news releases, CPSC plans to advertise the availability of SaferProducts.gov on minority media outlets and work with libraries and public computer centers to ensure that individuals without residential computers are able to access SaferProducts.gov. In addition, CPSC will develop a variety of bilingual (English and Spanish) messages, materials, and programs.

Drowning prevention campaign

Section 1407 of the Virginia Graeme Baker Pool and Spa Safety Act (VGB Act) – a child safety law aimed at preventing drownings, entrapments and eviscerations – calls upon CPSC to implement an information and education program targeting pool operators and owners, pool industry stakeholders including state and local officials, and the general public through national and local media. CPSC plans to award a contract to conduct this effort, and a Request for Quotation (RFQ) was finalized on September 17, 2009. CPSC plans to target underserved populations with drowning prevention safety messages.

The RFQ requires a contractor to create a full scale, nationwide multi-media information and education campaign for the general public and the pool and spa communities, to include owners and operators, manufacturers, retailers, service providers, state and local entities, and pool and spa-related associations and organizations. The campaign will provide messaging on general pool safety with an emphasis on drowning prevention, on the hidden dangers of drain entrapment, and on the VGB Act.

The contractor will develop a Public Relations Campaign Plan that will address branding, the creation of a unique logo, and a title to communicate swimming pool safety as it pertains to children's drowning and entrapments. The plan will include an innovative approach to make a difference in the mind of the target audience leading to greater awareness of the issues and behavioral changes. The plan will also include strategies to reach minority groups, those in rural areas, and the Spanish speaking communities. Where appropriate, the contractor will provide

Spanish language materials for dissemination to key Spanish language media, Web sites, and at community events.

Once the initial campaign brand is established and underway through various outreach tools, the contractor will follow-up with the outreached communities and conduct research about the public's and pool communities' general level of knowledge about pool safety, child drowning, and drain entrapment in order to learn where the remaining resources should be focused for a continued campaign.

4. Conclusion

To better understand the relative risk of product-related injury among minority and nonminority children, CPSC is undertaking a number of activities to improve the data that is collected by the National Electronic Injury Surveillance System (NEISS). These activities include:

- · Modifying NEISS data collection software with respect to racial and ethnic classification
- · Presenting materials on the importance of collecting standardized race and ethnicity data when conducting on-site evaluations and/or training of NEISS hospitals
- · Preparing new questionnaires with a core set of demographic questions, which will be included in all telephone follow-back interviews assigned from NEISS data
- · Leveraging data collection efforts of other government agencies, where feasible, to gather consumer product-related death and injury data involving minority children

CPSC is also exploring ways to collect race and ethnicity data from consumer complaints received through our Web site or the CPSC hotline. As the race and ethnicity data that CPSC collects improves, staff will use the data to develop safety messages targeted to at-risk populations.

To improve the effectiveness of consumer information efforts targeted to minority and underserved communities, CPSC will continue its current outreach activities and plans additional activities in 2010:

- · A Minority Outreach Tour in major cities with highly diverse populations to provide safety messaging in large community settings
- · A community-based outreach initiative to increase relationship development with grassroots organizations that target diverse populations
- · A public awareness campaign, using bilingual (English and Spanish) messages and materials, to raise awareness of SaferProducts.gov
- · A drowning prevention campaign, including dissemination of materials to key Spanish language media, Web sites, and at community events

CPSC will assess its effectiveness in reaching target audiences through these outreach activities. Assessments will include initiating a telephone or online survey for Neighborhood Safety Network members and, for the drowning prevention campaign, conducting research with the public and pool communities to learn where remaining resources should be focused for a continued campaign.

These efforts should improve CPSC's ability to identify products hazards affecting children in minority and underserved populations and strengthen our ability to reach minority communities with our important safety information.