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# EXAMINING POOL SAFETY ISSUES

## HEARING

BEFORE THE

SUBCOMMITTEE ON CONSUMER AFFAIRS, PRODUCT SAFETY, AND INSURANCE

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

MAY 3, 2006

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# EXAMINING POOL SAFETY ISSUES

**WEDNESDAY, MAY 3, 2006**

U.S. SENATE,
SUBCOMMITTEE ON CONSUMER AFFAIRS, PRODUCT SAFETY, AND INSURANCE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
*Washington, DC.*

The Subcommittee met, pursuant to notice, at 2:30 p.m. in room SD–562, Dirksen Senate Office Building, Hon. George Allen, Chairman of the Subcommittee, presiding.

## OPENING STATEMENT OF HON. GEORGE ALLEN, U.S. SENATOR FROM VIRGINIA

Senator ALLEN. Good afternoon, everyone. I call to order this hearing of the Senate Subcommittee on Consumer Affairs, Product Safety, and Insurance. I'm sorry, I'm a bit late. We're having a top secret briefing from Secretary Rice and Secretary Rumsfeld on Iraq. And as you might guess, that ends up being a pretty engaging hearing. But, I wanted to get here and start this.

We may have a vote, I understand in the midst of everything. We're going to try to figure a way to keep this working as a tag team, here with my colleague, Ranking Member of the Subcommittee, Senator Pryor, to keep it moving so that you all don't have to stand down and wait until we get back in force. So, we'll try to keep the hearing moving forward.

Today at this hearing, we're going to examine the issue of swimming pool and spa safety, hoping to understand a more prudent means toward ensuring that everyone safely and responsibly enjoys pools and spas.

I thank my good colleague and Ranking Member of the Subcommittee, Senator Pryor, for attending and helping promote greater awareness of the pertinent issues surrounding pool and spa safety. I thank you for helping me to examine all the issues that come before this Subcommittee, many of which you instigate and are good ideas. We work very well together. Again, we're coming together on an issue that's of concern to many people and I very much also appreciate and thank our witnesses, all of you, for being here and your willingness to discuss some sensitive and sometimes obviously, emotionally devastating topics.

Potential mishaps and tragedies, obviously, can result from using pools and spas. We use the term spas like hot tubs, others use the term hot tubs. But each of our witnesses will be able to discuss particular aspects of this area of inquiry and hopefully lead us to a more complete understanding of how to maintain and improve

pool safety and spa safety, as well. And I appreciate the time that you have taken to prepare your testimonies, some of them heartfelt, and to come before the Subcommittee this afternoon.

In my view, consumer awareness and education are the proper precautions and responsible approaches here, so that people do understand how you can better use swimming pools. Some people just look at them as places to swim, but there are some dangers, clearly. And as we are heading into the summer, the warmer late spring, summer months, this is more important than ever.

In fact, just the fact that we're having this hearing. I was talking to one of the women who work on the floor of the Senate and she said, gosh, I read *USA Today* and my gosh, I have young children. The heart wrenching story, she's concerned about it. Some other person said, gosh, I was watching Larry King Live and saw some of these stories. And so, there's a great deal of interest and a lot of it, regarding what will come from this hearing, particularly in terms of information, education, and proper precautions. When you and your child go swimming, and this is what most parents would think, this is going to be a fun adventure. You do worry about drowning or somebody hitting their head, but you would never think of the drains necessarily, until all of this has come up as a danger.

We need to make sure that we understand the best practices for protecting any child from inadvertent injury or even death, which is an awful, terrible death if caught up in a drain. And it should be a fun experience, but the reality is, in studying this issue as we were preparing for this hearing, pool deaths or accidental injury related death from drownings is the second leading cause of death in this country for children ages one to four. Automobile wrecks are number one.

A parent or an adult supervising is obviously of paramount importance in preventing injuries and death. And while most parents and adults are going to do whatever is reasonably prudent, so to speak, to watch their children, to supervise their children around pools and spas, still, even when attentive parents and adults are around, these accidents can unfortunately happen.

We should be able, I believe, to come together for good reasonable solutions to try to avoid the devastating effects that result from a drowning or water-related injury.

Today, we hope to gain knowledge of the proper balance between enjoyment and safety when it comes to the use, the design, construction, and maintenance of swimming pools, and spas, or hot tubs. A general review of pool safety before heading into the summer, as more and more families are preparing for their time outdoors and in the sun, is an initiative that hopefully, will lead to a reduction of injuries and deaths. Swimming should be an activity that people are able to enjoy.

And our intent here today, is to listen to our witnesses, hear their constructive ideas, hoping to hear various perspectives on how to avert harm and improve safety for all pool and spa related activities. We hope that our witnesses will offer possible suggestions for improving pool and spa safety as well. Now, we look forward to hearing from each of our witnesses on the prudence of Federal involvement in addressing pool safety as well as ways beyond

this hearing for improving consumer awareness of pool and spa safety measures.

This is an emotional hearing to hold and all involved are to be commended for their participation and consideration of proposals on how to ensure our spas and pools are safe facilities for recreation. We have the opportunity today to examine pool safety. I believe this is actually the first Senate hearing on this subject, as far as I know. The first hearing in the Senate of its kind to collaborate and share with one another all available options toward alleviating and preventing the heartbreaking and heart-wrenching pain that is caused when a loved one is injured or loses his or her life in a pool accident.

And so, I feel very strongly that education on these matters is a step in the right direction. We've already said—I've heard comments on it. I don't know my Ranking Member or whether or not—is Congresswoman Debbie Wasserman Schultz somewhere in the audience? She may be coming over. She's to be commended for her leadership on the House side on this issue and whatever may move forward as we consider the evidence and testimony presented before us today. Everyone's comments will certainly be taken into account.

And with that, Senator Pryor, would you like to make any comments before I introduce the witnesses?

**STATEMENT OF HON. MARK PRYOR,**
**U.S. SENATOR FROM ARKANSAS**

Senator PRYOR. Thank you, Mr. Chairman. And I do believe the House is in a series of roll call votes right now, so hopefully the Congresswoman will come over as soon as she has a chance.

This is an issue that's near and dear to my heart, because I have two children that are prime swimming pool age—age 10 and 12. And obviously, that's one of their all time favorite activities. They love to swim and spend a lot of time in the swimming pool every summer.

As the Chairman said a few minutes ago, we recognize this is the second leading cause of preventable child deaths and we need to underline that word preventable. That's one of the things that makes this so heart breaking when you hear these stories and by the way, I think we've heard three of these stories in the last 48 hours, here in the U.S., that children die in swimming pools. These accidents by and large, are very, very preventable. And it makes it very, very painful, very emotional for families to lose their children in this way.

I want to thank Safe Kids for the work they've done to highlight this issue for parents. A big part of this is parental education and to really talk about pool safety as part of National Safe Kids Week. And I know that Johnson & Johnson and others have come forward to try to help in this effort.

So, I appreciate them and I want to thank all the witnesses for being here. I know that particularly for Ms. Baker, this is going to be painful and emotional. But we want to thank you, all of the witnesses specifically, for coming. And I want to thank the Chairman here. He's been very, very cooperative on this and other issues. And Chairman Allen has done a great job in trying to promote this

issue and a lot other consumer issues through this Subcommittee. And so, I just want to thank you and acknowledge all the hard work that you've done on this and many other issues.

So, I look forward to hearing from the witnesses. I understand we're going to have a vote at some point, here in the next little bit. I'm not sure quite what the schedule is, but we'll work through that. Thank you.

Senator ALLEN. Thank you, Senator Pryor. All of us who have children, I was just listening to the stories and I have children from 8 to 17 and they go over to their swimming pools, and they go over to their cousins' where they have a hot tub, and all of that. And you hear these stories and you think, gosh, what seems like such an innocent fun event, splashing around, can be something that's deadly.

With that, Senator McCain has joined us. And Senator McCain, would you like to make any opening statement?

**STATEMENT OF HON. JOHN MCCAIN, U.S. SENATOR FROM ARIZONA**

Senator MCCAIN. There's very little I can add to your and Senator Pryor's very thoughtful remarks. I noticed with some interest that the drowning was the leading cause of accidental death in and around the home for children under the age of five in California, Arizona, and Florida. So I think this is a timely and important hearing.

Ms. Baker, our prayers go out to you and all families for whom you speak and I thank you for your dedicated effort on behalf of this issue. And I hope we can act effectively and quickly. Thank you, Mr. Chairman.

Senator ALLEN. Thank you, Senator McCain. We very much appreciate you joining this hearing. I'm going to introduce the first panel of one, and then introduce the second panel when they come forward. Before we listen to the testimony, Ms. Elder, I would like to introduce our first panelist.

This is Ms. Jacqueline Elder, who has previously testified in front of our Subcommittee. She is the Assistant Executive Director for Hazard Identification and Reduction at the Consumer Product Safety Commission. She has a great deal of technical knowledge in the area of pool and spa safety arising from her time spent in a leadership role on this issue at the CPSC.

Her division at the Consumer Product Safety Commission also compiles many of the statistics that we've been talking about concerning and regarding pool safety, including injury and death data. So, she'll be able to give us a better idea of the breadth and the extent of the challenges we face in addressing pool and spa safety.

We're glad you agreed to testify today, Ms. Elder, and we look forward to your testimony. Welcome back and you may begin.

**STATEMENT OF JACQUELINE ELDER, ASSISTANT EXECUTIVE DIRECTOR, HAZARD IDENTIFICATION AND REDUCTION, CONSUMER PRODUCT SAFETY COMMISSION**

Ms. ELDER. Thank you, Mr. Chairman, and good afternoon. I am pleased to have this opportunity to come before your Subcommittee today. The U.S. Consumer Product Safety Commission or CPSC, is

a bipartisan independent agency charged with protecting the public from unreasonable risks of serious injury or death from more than 15,000 types of consumer products.

We are proud of our mission and our achievements, and we appreciate the support that Congress has extended to the agency and to its goals over the years.

Today's hearing is on the very important subject of pool safety. CPSC estimates that every year, more than 200 children under 5 years of age drown in swimming pools and more than 2,000 children under 5 visit hospital emergency rooms after submersion in pools.

Several years ago, CPSC conducted an extensive study of swimming pool incidents in selected states where home pools are very popular and in use during much of the year. The findings from that study are instructive.

Most of the victims were being supervised by one or both parents when the submersion occurred. Almost 70 percent of the child victims were last seen in the house or nearby on a porch or in the yard just before the pool incident occurred. The speed with which swimming pool drownings can occur is devastating. A child can drown in the time that it takes to answer a phone. Seventy-seven percent of the swimming pool victims had been missing for 5 minutes or less when they were found submerged.

Swimming pool drownings of young children have another particularly insidious feature in that these deaths are silent. It is unlikely that splashing or screaming will occur to alert a parent or caregiver that a child is in trouble. While we underscore that there is no substitute for diligent supervision, CPSC recommends multiple layers of protection to guard against pool drownings. Constructing and maintaining pool safety barriers to prevent young children from gaining access to pools is an essential first step, though not the only step, that every pool owner must take. The Consumer Product Safety Commission has issued a publication with safety barrier guidelines for home pool owners, and I would like to submit this publication to the Committee for the record.

Senator ALLEN. It'll be made part of the record.*

Ms. ELDER. Thank you. Drowning hazards related to spas, hot tubs, and whirlpools are also an area of concern to our agency. For 2002, CPSC has reports of nine children under the age of five who drowned in a spa or hot tub. One area of special concern regarding both spas and pools is deaths resulting from body entrapment or hair entanglement. CPSC is aware of 74 cases of body entrapment, including 13 deaths between 1990 and 2004. These deaths were the result of drowning after the body was held against a drain by the suction of the circulation pump. In that same time period, CPSC is aware of 43 incidents of hair entanglement in drain grates. Twelve of these incidents resulted in drownings.

CPSC's publication, "Guidelines for Entrapment Hazards: Making Pools and Spas Safer," provides important safety information that can be used to identify and eliminate dangerous entrapment

*The information referred to has been retained in Committee files and can be obtained at *http://www.cpsc.gov/CPSCPUB/PUBS/Pool.pdf.*

hazards. We'd also like to submit a copy of that publication for the record.

Senator ALLEN. Thank you. It will be made part of the record.*

Ms. ELDER. Thank you. Last year, CPSC's annual comprehensive national pool safety campaign focused on pool drain entrapment hazards. As part of this information and education drive, CPSC's Chairman participated in a widely covered media event at a local pool to emphasize our message of providing layers of protection to prevent entrapments and child drownings.

Another development last year was the identification of an emerging hazard with inflatable pools. These are relatively new products that sell inexpensively at retail outlets and hold large volumes of water. They often fall outside of local building code requirements and are often set up in backyards without consideration to appropriate barriers.

CPSC is working with the voluntary standards organization, ASTM International, and committees have been established to focus on structural integrity, access and barriers, entrapments, electrocution, and warnings with regard to inflatable pools. Because of new technologies and new products, pool safety standards work is never a completed project, but rather, it is always an ongoing effort to assure the highest level of safety for America's families.

CPSC will continue to work aggressively to reduce these deaths and injuries by working with safety standards organizations, state and local code officials, consumer groups, and other concerned parties and by conducting comprehensive education and public awareness campaigns. In fact, on May 17th, we will be launching our 2006 public awareness and education campaign, this year focused on hazards associated with inflatable pools. We appreciate the Committee raising awareness of this critical issue, and I am pleased to answer any questions that the Senators may have. Thank you.

[The prepared statement of Ms. Elder follows:]

PREPARED STATEMENT OF JACQUELINE ELDER, ASSISTANT EXECUTIVE DIRECTOR, HAZARD IDENTIFICATION AND REDUCTION, CONSUMER PRODUCT SAFETY COMMISSION

Thank you, Mr. Chairman, and good morning. I am pleased to have this opportunity to come before your Subcommittee today. I am the Assistant Executive Director for Hazard Identification and Reduction at the U.S. Consumer Product Safety Commission or CPSC. The CPSC is a bipartisan, independent agency charged with protecting the public from unreasonable risks of serious injury or death from more than 15,000 types of consumer products under the agency's jurisdiction.

Since its inception in 1973, CPSC has delivered critical safety benefits to America's families and has made a significant contribution to the 30 percent decline in the rate of deaths and injuries related to hazardous consumer products. We are proud of our mission and our achievements, and we appreciate the support that Congress has extended to the agency and to its goals over the years.

In my role at CPSC, I oversee the technical work of the agency within the directorates for Epidemiology, Engineering Sciences, Economic Analysis, Health Sciences and Laboratory Sciences. My office is responsible for the collection and analysis of death and injury data concerning consumer products which include swimming pools and related products such as hot tubs, whirlpools, and spas and related accessories as varied as pool slides, drains and alarm systems.

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*The information referred to has been retained in Committee files and can be obtained at *http://www.cpsc.gov/CPSCPUB/PUBS/363.pdf.*

CPSC estimates that every year over 200 children under 5 years of age drown in swimming pools and more than 2,000 children under 5 visit hospital emergency rooms after submersion in pools.

Several years ago, CPSC conducted an extensive study of swimming pool incidents, both drownings and non-fatal submersions, in selected communities in the states of California, Arizona and Florida where home pools are very popular and in use during much of the year. In those three states, drowning was the leading cause of accidental death in and around the home for children under the age of five. The findings from that study are instructive.

Most of the victims were being supervised by one or both parents when the submersion occurred. Almost 70 percent of the child victims were last seen in the house or nearby on a porch or in the yard just before the pool incident occurred. A full 98 percent of the incidents occurred in a pool owned by the victim's family or friends with only 2 percent of the incidents involving children trespassing onto property where they didn't live or where they didn't belong.

The speed with which swimming pool drownings can occur is devastating. A child can drown in the time that it takes to answer a phone. Seventy-seven percent of the swimming pool victims had been missing for five minutes or less when they were found. Anyone who has cared for a toddler knows how fast young children can move. Toddlers are inquisitive and impulsive and lack a realistic sense of danger. These behaviors, coupled with a child's ability to move quickly and unpredictably, make swimming pools particularly hazardous for households with young children.

Swimming pool drownings of young children have another particularly insidious feature in that these deaths are silent. It is unlikely that splashing or screaming will occur to alert a parent or caregiver that a child is in trouble.

While we underscore that there is no substitute for diligent supervision, CPSC recommends multiple layers of protection to guard against pool drownings. Constructing and maintaining safety barriers to prevent young children from gaining access to pools is an essential first step that every pool owner must take. The Consumer Product Safety Commission has issued a publication with safety barrier guidelines for home pool owners that addresses fencing, gates, and doors leading to the pool, as well as other special requirements for above-ground pools. I would like to submit this publication on safety barriers to the Committee for the record.

In addition to these various types of barriers, CPSC also recommends additional layers of protection such as safety covers and pool alarms. For pool alarms, CPSC advises that consumers use remote alarm receivers so that the alarm can be heard inside the house or in other places that are outside of hearing range from the pool.

Drowning hazards related to spas, hot tubs and whirlpools are also an area of concern to our agency. In 2002, CPSC has reports of nine children under the age of five who drowned in a spa or hot tub. CPSC recommends that consumers use barriers, including a locked safety cover, whenever the spa is not in use and keep children away unless there is constant adult supervision.

One area of special concern regarding both spas and pools is deaths resulting from body entrapment or hair entanglement. CPSC is aware of 74 cases of body entrapment, including 13 deaths between 1990 and 2004. These deaths were the result of drowning after the body, or a limb, was held against a drain by the suction of the circulation pump. CPSC is also aware of 43 incidents of hair entanglement in pools, spas and hot tubs between 1990 and 2004. Twelve of these incidents resulted in drowning deaths as a result of hair becoming entangled in drain grates.

CPSC's publication "Guidelines for Entrapment Hazards: Making Pools and Spas Safer" provides safety information that can be used to identify and eliminate dangerous entrapment hazards in swimming pools, spas and hot tubs. After initially publishing the guidelines in 1998, CPSC received feedback from code officials and pool operators across the country who had applied them in practice. As a result of this feedback, as well as the development of new technologies and product safety standards, CPSC initiated a project in 2003 to update the guidelines based on the information we received from the experiences of these professionals. In 2005, CPSC published the updated guidelines, and I would like to submit a copy of that publication for the record. The approach taken in the guidelines is to present various options to attain "layers of protection" and to strongly encourage owners and builders to construct, renovate and maintain pools that are as safe as possible for the families who enjoy them.

Also in 2005, CPSC's annual comprehensive national safety campaign focused on pool drain entrapment hazards. As part of this information and education drive, CPSC's Chairman participated in a widely covered media event at a local pool to emphasize our message of providing layers of protection to prevent young children from drowning. The event demonstrated a drain entrapment scenario and included live demonstrations of pool alarms. Additionally, as part of this public awareness

and education campaign, CPSC field staff made contacts nationwide with state and local pool inspectors, pool contractors and licensing bureau officials to help disseminate our pool safety message.

Another development last year was the identification of an emerging hazard with inflatable pools. In June, CPSC staff cosponsored a meeting with ASTM, a voluntary standards organization, and invited a wide variety of interested parties involved in inflatable pool safety. These are relatively new products that sell inexpensively at retail outlets and hold large volumes of water. They often fall outside of local building code requirements and are often set up in backyards without consideration to appropriate barriers. An ASTM organizational meeting was held last December at CPSC headquarters in Maryland, and working committees were established on areas such as structural integrity, access and barriers, entrapment, electrocution, and warnings.

Since then, CPSC staff has continued its work to address hazards associated with swimming pools and spas. CPSC staff continues to work with safety standard organizations in developing and strengthening voluntary safety standards for such pool related products as alarms, drain covers and suction vacuum release systems. Because of new technologies and new products, pool safety standards work is never a completed project, but rather it is always an ongoing effort to assure the highest level of safety for America's families.

CPSC is a small agency, and working with state and local authorities and concerned citizens is an integral part of CPSC's effort to amplify our message on drowning hazards. In 2004, the Commission held public field hearings on pool safety in Tampa, Florida, and Phoenix, Arizona, to gather information firsthand and to raise awareness of the drowning hazard in the United States. CPSC invited state and local legislators, building code officials, emergency first responders, community groups and others to testify. The information presented at those hearings by the public and local authorities has been extremely helpful to the agency's work on this issue.

CPSC will continue to work aggressively to reduce these deaths and injuries by working with safety standards organizations, state and local code officials, consumer groups and other concerned parties and by conducting comprehensive education and public awareness campaigns. In fact, on May 17th, we will be launching our 2006 public awareness and education campaign, this year focused on hazards associated with inflatable pools. We appreciate the Committee raising awareness of this critical issue, and I am pleased to answer any questions that the Senator may have. Thank you.

Senator ALLEN. Thank you, Ms. Elder, for your testimony. Let me follow up with some questions and Senator Pryor undoubtably, will have some questions of you as well. In a Commission publication, *Safety Barrier Guidelines for Home Pools,* it states that 77 percent of the swimming pool accident victims have been missing for less than 5 minutes. You testified for that or less, when they are found in the pool drowned or submerged. Are there any products, and while you can identify all the stats, and data, and so forth, are there any products recommended to alert adults of a child's entering, or are there some better suited approaches to reduce this lag time, or any sort of devices, products, systems that you all would recommend to make pools safer?

Ms. ELDER. Yes. We look at it and recommend layers of protection to overcome what we see as usually a short lapse in supervision and to buy time, so that the child can be discovered before they enter the pool. First and foremost, we recommend a barrier completely surrounding the pool, and it's important that that barrier restrict access from the home to the pool, since many of the children were last seen in the home. If it's not possible to have a fence completely surrounding the pool, then we recommend alarms on doors that lead directly from the house to the pool or that there be a power safety cover on the pool. We also recommend pool alarms or in-water alarms as an additional layer of protection.

Senator ALLEN. Have you recommended those in particular for new pools or retrofitting for existing pools?

Ms. ELDER. We recommend a barrier completely surrounding the pool for all pools. And pool alarms we recommend also, for all pools as an additional layer of protection.

Senator ALLEN. How easy is that? Well, is putting a fence—it depends on the configuration of a home. But insofar as alarms and so forth, would you have a different standard for a commercial facility versus a residential?

Ms. ELDER. Our focus has been on residential pools——

Senator ALLEN. OK.

Ms. ELDER.—and drownings of children under the age of five.

Senator ALLEN. Are you aware whether there's uniformity in the states, as Senator McCain mentioned Arizona, obviously the states that have the most pools are going to be those such as California, and Florida, Texas, Arizona, those states that have a lot of pools. I'm sure there's a pool or two in Alaska. Probably a hot tub. But something like a whirlpool as you called them, but do you see that the states are following these guidelines and these recommendations?

Ms. ELDER. There are widely varying requirements in the states, and I think some states—a very few states, have state legislation regarding pool safety. For others, it's handled at the county or local level and it varies throughout the country.

Senator ALLEN. Let me ask you, one thing that has come up is devices that are called safety vacuum release systems, otherwise known as SVRSs. I note that your guidelines do not specifically endorse these safety vacuum release systems. I understand that they work when the suction from the bottom drain of a pool is so strong, and maybe the cover is off or for whatever reason not attached, or it's broken off. Say a kid going down to get goggles down by the drain or you know like kids jumping in or somebody's throwing a penny in to see if they are going to get it and they go down there, and the suction is so great on the drain. And these safety vacuum release systems would have a sensor on them, that if something is pulled in by the drain—whether it's clothing, or whether it's hair, or whether it's an arm, a leg, or a foot that it would stop the suction. Now two things here. One, you for whatever reason, do not specifically recommend SVRSs and I would like to know why they are not recommended devices in your guidelines? I think that some of our witnesses are going to testify to the effectiveness of such devices. And beyond that, I also understand that as a practical matter and this would be for pools going forward, that if you have the skimmers on the side and you put those—I don't know what they call them. They call them all sorts of different names, but there's a tube on them and you use the cleaning of the bottom with one of the whirlybirds or whatever they call all these things, sharks or something like this. At any rate, then you end up cleaning the bottom anyway and you still get the circulation of the water that way, but you don't have the drain. This would be on cement pools as opposed to vinyl liner pools. But insofar as the concrete pools, why do you not recommend at least for those that are built in the future, recognizing that it would be fairly difficult to retrofit or maybe it would still be worthwhile, but at least for pools that are

being constructed from henceforth, why would you not recommend a safety vacuum release system?

Ms. ELDER. In our——

Senator ALLEN. And I'm not saying you, it's the whole Commission, don't take it personal.

Ms. ELDER. Well actually, in our guidelines for preventing entrapment hazards, we do recommend extensive use of SVRS type systems. We believe that there is no single solution to addressing the entrapment hazard. And again, we recommend layers of protection. For older construction where it's not possible to rework the system so that you would have multiple drains, we recommend that SVRS or equivalent technology be used. For wading pools, for public wading pools, even if they have multiple drains, we do recommend also that SVRS be used since the drain is so accessible to young children.

For new construction, we believe there are designs that can basically eliminate the entrapment hazard, and so in that situation, we recommend consideration of using an SVRS as an additional layer of prevention—especially if it's been tested to prove that it reduces entrapment. We also recommend that the appropriate drain covers be used to address body entrapment and hair entanglement. So we have quite extensive recommendations within our guidelines for the suction vacuum release technology or equipment types of technology that would serve the same purpose.

Senator ALLEN. Do you specifically endorse these devices that shut off suction or vacuum force of the pool drains in case of entrapment? You're saying that you do endorse that as one of the layers or a different options.

Ms. ELDER. We recommend them as one of the layers of protection.

Senator ALLEN. Why do you believe that the states have not acted because the building codes are primarily state codes which are administered by the localities, the local building officials in whatever county or city in which this construction is taking place, why do you think that the states have not acted in this regard?

Ms. ELDER. With regard to suction entrapment, I believe——

Senator ALLEN. And not just for—yes, OK. For suction entrapment.

Ms. ELDER. I can start there and then——

Senator ALLEN. Right.

Ms. ELDER.—I'll go back, but I think particularly with suction entrapment, it's a very hidden hazard and there isn't wide awareness of it. And I really do appreciate the efforts that are going on with Safe Kids and Ms. Baker to bring awareness to this issue, because I do think that one of the reasons that it's not been addressed is that it is such a hidden hazard and there isn't awareness out there.

With barriers and the child drowning issue, I believe in the states, and particularly in the Sunbelt states, where there are a large number of pools and a large number of child drownings, we are now starting to see that coming into the codes in those states. But still, I believe it's a matter of education and awareness of the problem.

Senator ALLEN. Well, that's one of the purposes of this hearing, to raise awareness. And I thank you. Senator Pryor, do you have any questions?

Senator PRYOR. I do, thank you. When I look at this problem just in the abstract, I think of just tens of hundreds of thousands of pools out there and it's kind of hard to get a handle on how you should do—how we should do the public education and parental education on this.

However, I do think that there's a natural network out there and that would be the manufacturers obviously, in addition to the pool service technicians, the contractors, and the inspectors. They would seem to be able to get to the pool owner and educate them with material, or with information, or whatever it may be. Tell me—have you had any success in a targeted approach toward dissemination of public information like that?

Ms. ELDER. We have, for a number of years, done information education campaigns in this area. Both very broadly and in a targeted way and working with the industry and other interested parties to alert people to the issue and the hazard, as have many local jurisdictions and local—for example, medical personnel and firefighter personnel.

Senator PRYOR. Let me also ask about this relatively new phenomenon of the so called inflatable pool or the—I guess, they're more temporary type pools. I don't know a whole lot about them. But, I know with pools that are built in so to speak, you talk about safety barriers which as I understand it, it might be fencing, et cetera. What about these more inflatable, these more temporary type pools—what are your recommendations there?

Ms. ELDER. This is a difficult issue because they do have a substantial amount of water in them that definitely presents a hazard, and I think that people don't, because they're relatively inexpensive and sold to retail stores, people don't think about barriers with these pools and that's one of the reasons we're working with the interested parties to develop voluntary standards for this product. There is going to be a meeting at our headquarters on Tuesday, May 23rd, to look at what the task groups have come up with on this issue. We're looking at ways of possibly making the sides more of a barrier than they are now. Right now, they are very flexible and it's easy for children to fall in.

Senator PRYOR. OK.

Ms. ELDER. It is something that's being looked at now and a difficult issue to address.

Senator PRYOR. And I'm so glad that Senator Allen, a few moments ago, asked about SVRS because I had a question there too. But as I understand your guidelines or recommendations, as I understand it unless I'm wrong, I think what you're talking about right now is voluntary guidelines or voluntary things. Is there a reason why something like safer drain covers shouldn't be mandated?

Ms. ELDER. What we have done is made voluntary guidelines available to those parties that are interested. I think that we were very hopeful that the states would pick up these guidelines and use them as they're developing legislation. We've seen that work with other guidelines that we have in the area of playground safety,

where they've been adopted by the states as mandatory requirements.

Senator PRYOR. Are you familiar with Congresswoman Wasserman Schultz's legislation in the House?

Ms. ELDER. Yes, I am.

Senator PRYOR. Do you have any comments on that?

Ms. ELDER. I don't. I really can't comment on that. That would be something that would be for our Commissioners to comment on.

Senator PRYOR. OK. And the last thing I had is when you look at the statistics, as I understand what you said a few moments ago and in your written testimony, I believe you said, that there is some under-reporting of these type of incidents. Do you have a sense of how much under reporting there is and what the real numbers might be?

Ms. ELDER. With the overall child drowning incidents, we feel that our estimates are fairly accurate in that area. With regard to suction entrapment, we have a minimum count of the number of incidents that we're aware of. So, there may be some under reporting there. But, we've been very concerned about this issue for quite some time. And we've made a concerted effort to reach out across the country to learn about these issues. We've asked our field investigators to focus on it. We've asked our news clipping services throughout the country to look, and we've asked people in the public health community, and the medical community, and industry to report to us whenever they learn of a case regarding a suction entrapment.

Senator PRYOR. Thank you.

Senator ALLEN. OK. We—a vote just started at 3:20.

Senator PRYOR. So, do you want me to run and do that?

Senator ALLEN. If you want to run and do it. And when you get back, you can take over as Chair.

Senator PRYOR. Perfect. I'll be right back.

Senator ALLEN. Thank you. Let me ask Ms. Elder a few follow-up questions. You all seem to—or the Commission seems to place a heavy emphasis on the dual drain approach as a way of mitigating the dangerous suction force levels, is it your view or the view of the Commission, that dual drains by themselves are sufficient to mitigate the threat of entrapment drownings without a SVRS or other safety device?

Ms. ELDER. We do believe that information that we have indicates that dual drains can be an effective way of addressing the entrapment hazard.

Senator ALLEN. Even without one of the suction—without a suction cutoff device?

Ms. ELDER. We recommend consideration of an SVRS device when there are dual drains.

Senator ALLEN. Even when there are dual drains?

Ms. ELDER. Yes.

Senator ALLEN. OK, good. I wanted to get that. The final thing is that, you know it's not as if the only people who care about children are those in the Federal Government and we're having a hearing, first one of the Senate. The reason we're having this hearing is apparently that, for whatever reasons and maybe it's a lack of knowledge, lack of education, and I think this is very timely of

course. Probably before we get into the swimming season, that some states have and some states haven't put in these codes. Does your Commission, as a practical matter, have jurisdiction to have a standard to mandate these safety devices on pools and spas, whether it's safe drain covers, safety vacuum release systems, the fencing, thereby bypassing the need to get it done at the state level. And in other words, can the CPSC convert the pool and spa entrapment guidelines into a mandatory requirement?

Ms. ELDER. We would have to look at that. We have very strict findings that we have to make before we can issue a mandatory standard. So, we would need to look carefully at that and our authority to act in that area.

Senator ALLEN. And then I understand you're going to step up, at least in education process, before we get toward Memorial Day and Independence Day. Is that correct?

Ms. ELDER. Yes. We are going to announce our campaign on May 17th in the pool safety area.

Senator ALLEN. OK. Thank you, Ms. Elder.

Ms. ELDER. Thank you.

Senator ALLEN. I very much appreciate your testimony and your guidance, as well as your willingness to appear and prepare for us today. Thank you.

Ms. ELDER. Thank you.

Senator ALLEN. I would like to have now, after Ms. Elder leaves the bench, if we could have the second panel please come forward. It will be Ms. Baker, Mr. Laven, and Mr. Korn.

While our witnesses are getting ready, I understand that Congresswoman Wasserman Schultz is in the room somewhere. I've been—well, there you are, back there. Thank you. I want—I said it in your in absentia—let me say it with you here. Thank you for your leadership on pool safety in the House and your work also before then in the legislature for the State of Florida, in helping pass Florida's Residential Swimming Pool Safety Act. And I understand you're going to be introducing a measure, if you haven't already, in the House. Excuse me?

Ms. WASSERMAN SCHULTZ. Next Tuesday.

Senator ALLEN. Next Tuesday. All right, that's good to know. We're holding a hearing here and we're gathering evidence and information, so that we can make an informed judgment as to what would be appropriate action, whether by the Federal agencies or by the Senate as well. As I understand yours is an incentive-based program to encourage the states to adopt such laws. Being one who doesn't like dictates and mandates, an incentive approach is one that philosophically is more consistent with my principles and I thank you, Congresswoman, for you great leadership here. And if you'd—we're bound to be able to find a chair for you, if you don't want to keep standing.

Ms. WASSERMAN SCHULTZ. (Off microphone.)

Senator ALLEN. Thank you. All right, our second panel, we're going to hear from them. First is Nancy Baker, a mother who's come today to relate her personal story about the loss of her daughter in a spa suction entrapment accident.

And Ms. Baker, I know that you've become an outspoken advocate for increased pool and spa safety and it's an issue obviously,

close to your heart and it touches the hearts of all parents across America. And we're grateful that you've agreed to testify and you're testifying for your daughter as well, and for parents all across America. So, I really believe you're going to help us all understand much better, the issues and dangers associated with—whatever you want to call them, whirlpools, swimming pools, or spas. And we hope to strengthen, one way or another, the safety so that future accidents and deaths will be avoided.

Next, we'll then hear from Mr. Mark Laven who is the President of Latham Plastics, a company that manufactures fiberglass and vinyl line pools. He's testifying on behalf of The Association of Pool and Spa Professionals, a trade association representing many companies and individuals in the pool and spa industry. Mr. Laven's business expertise as well as his knowledge of the most appropriate method for constructing safer pools and spas will be, I think, very helpful to us in understanding what's the best and most appropriate way to proceed.

And we thank Mr. Laven, for coming here. We understand that you flew down from Latham, New York and we appreciate you being here.

And finally, we'll hear from Alan Korn, a familiar face here on Capitol Hill and someone who has pioneered safety advocacy for Safe Kids, not just here, but worldwide. Mr. Korn is—as Director of the Public Policy and as General Counsel for Safe Kids, with the backing of his organization, has made it a goal to prevent accidental childhood injury.

In the context of pool and spa safety, Safe Kids Worldwide has declared this National Safe Kids Week, as well. Your leadership, Mr. Korn, on this issue and the desire to inform all consumers of the best means toward making their favorite—or at least one of their favorite summertime activities as safe as possible, is commendable. And we thank you for coming and we look forward to hearing from your testimony.

We're going to first hear from Ms. Baker, and if you're ready to proceed——

Ms. BAKER. I am.

Senator ALLEN.—we'd like to hear from you, ma'am.

## STATEMENT OF NANCY BAKER, POOL AND SPA SAFETY ADVOCATE

Ms. BAKER. Thank you. Thank you. My name is Nancy Baker and it is my pleasure to testify before the Senate Consumer Affairs, Product Safety, and Insurance Subcommittee today. And I thank you for allowing me to address the important topic of pool and spa safety. Although it's a great privilege to be given the opportunity to speak, I'm so very sorry for the circumstances that have brought me here. I thank you, Chairman Allen. I'm actually your constituent. I'm from Virginia. And I also thank Senator Pryor, for holding this hearing.

In June of 2002, nearly four years ago, my seven-year-old daughter, one of a set of twins, lost her life in a spa. Her death has brought me here, with both a deep sense of regret and a deep sense of duty to communicate to you how critical it is for the Federal

Government to intervene in a situation which is costing this country literally hundreds of lives every year.

On a magnificent Saturday in June of 2002, I attended a pool party with my five daughters. My three youngest children entered the pool when we arrived. All of them had been swimming unassisted for at least 4 years and had grown up with a pool in their own back yard. I stood on the pool deck at this event, providing what I then thought was sufficient supervision for my children. At one point I realized that only two of mine were in the water and after scanning the pool—the bottom, the sides, the deck, I made an assumption that one, named Graeme, had gone inside the home we were visiting. There were many people both in and around the water, there was music, and food and distraction. There was no lifeguard, nor any one person whose sole job was to watch the water.

Moments later my 11-year-old daughter came running from one end of that pool toward me, with terror and horror in her eyes. And she told me that her sister Graeme was in the hot tub. I ran to the edge of this tub and looking down, I saw nothing but dark and bubbling water. She insisted that Graeme was there. I jumped in, I put my head underwater and what I saw is beyond what I can describe. Her eyes were pinched closed, her limbs and hair were moving with the current of the water from the jets on the side. I tried to pull her up and I pulled with all of my strength, and in the confusion and panic, I could not raise her up. I dove down, again and again, screaming for help until finally I gave up and I ran to a grassy area adjacent to the deck and I collapsed in agony.

Two parents pulled her out and they were rolling her from side to side, and I could see this—attempting to provide CPR to her. Finally, paramedics arrived and I was reassured that Graeme's heart was beating and that there was hope. She was flown to the hospital. And when I arrived there, I was taken into a small room in the emergency department. Still wet, wrapped in a blanket and I heard a voice say the impossible. That my daughter, Graeme, was gone and that they had done everything they could to revive her. And it was a moment that ended many lives, as for me and my family there was one life that we knew before her death and quite another that we have lived since.

I was asked if I wanted to see her, and in truth, I was almost too frightened to know how to answer that question. I did, and I am grateful for those moments that I was able to hold her, and rock her, and sing that lullaby, and say goodbye and goodnight in a horribly painful way. I look to the day when I am with her again.

Graeme died because she became entrapped, pinned underwater on the drain of the spa she was playing in. Her body was held there by hundreds of pounds—hundreds of pounds of suction force. It took two adults to pull her off the drain. The force so great that the cover of the drain, and it was attached properly, cracked in half from moving her.

Over the days and months since her death I have come to accept that she's gone. But I cannot however, accept the circumstances that took her life. This spa had been serviced by pool professionals the day before my daughter swam in it. It was considered to be in working order. In fact, this spa posed a tremendous hazard as do

spas and pools around this country today. There were voluntary guidelines issued by the CPSC that were in place at that time, but none of the recommendations that were outlined in those guidelines were in place in the spa where she died. Nor were there local building codes which would compel those safety measures to be installed. And because of the voluntary nature of those guidelines this beautiful—I mean beautiful, healthy, magnificent little girl found herself in horror and panic, with her buttocks pinned at the bottom of this spa, unable to come up for air. And I have since discovered that this has been occurring for decades.

Safe Kids was e-mailed last night by a woman whose daughter was entrapped and died in 1973 and she said she cannot believe it's still going on. What is critical to realize is that in these instances, the pools were in compliance with the local building codes at the time. Therefore, I am here as a parent of one of those victims to beg of you to please exert the influence you have and insist that the codes within these states be examined and written to require that certain measures be taken to end these deadly accidents and that they are consistent throughout this country. I'm out of time.

Senator ALLEN. You can take all the time you want, Ms. Baker. Ignore these lights.

Ms. BAKER. OK. I'm sorry. I don't have too much more.

Senator ALLEN. The rest of you may get 5 minutes, but Ms. Baker takes all the time she wants.

Ms. BAKER. I'm sorry. We face a situation in this country where the pool and spa industry resists the layers of protection that are needed to prevent entrapment. Furthermore, the industry has undertaken intense lobbying efforts throughout the United States urging that local building code officials not adopt all these layers of protection modeled after the International Building Codes.

I can provide you with articles in which certain individuals and industry associations celebrate the defeat of bills introduced on a state level intended to provide building standards, which would ultimately safe lives. These standards have been referred to as burdensome, yet the truth is there is no greater burden, I can promise you, there is no greater burden than the loss of a child.

My family and I applaud and fully support the legislation that Congresswoman Debbie Wasserman Schultz is introducing in the House of Representatives, as it is intended to provide incentive for the states to provide safe building codes consistent with the recommendations of the independent International Building Codes.

Entrapment is a mechanical problem, it isn't an accident. When a repairman comes to my home to work on my furnace or appliance, there are explicit codes that he must follow in order to leave that product working in a way that ensures the safety of the people using it. And my sense is, that there is a consistency throughout the United States in those standards. When a pool is serviced, the codes which guide the work being done leave pools and spas in dangerous conditions, leaving people using them vulnerable to death and injury beyond the protection against entrapment.

This legislation calls for four-sided barrier fencing around pools, isolating the water from the entrances and exits of the home protecting the children who live in that home. The vast majority of

drownings occur in backyard pools, usually due to a momentary lapse of supervision, where a child slips out of the house without a caregiver noticing. As conscientious and responsible as all parents try to be, it is human nature to have momentary distractions and we must, as a society, insist that we put something between our children and the water to prevent their access to a huge fascination for them—water.

One hundred children are dying every summer in pools and spas. Approximately 1,500 children were treated in the emergency rooms for near drownings in pools. The Federal expense in providing financial incentives to the states to adopt safe building codes must be weighed against the medical cost of providing care to an individual who sustains permanent neurological damage due to a near drowning and a lifetime of medical care. And that's just the beginning. There is no value you can assign to the emotional toll of drowning.

In closing, it gives me great hope that this hearing is being held today. From a personal perspective, it's healing to sense that from a loss that has taken such a tremendous toll on all of my family that the possibility exists that some good may come from a senseless and utterly preventable death.

I have faith that my angel, Graeme, is helping to urge us along. I am certain that she gives me the strength to go on without her, but always on behalf of her and the others whose lives were cut short in this horrendous way. Those children knew that something was terribly, terribly wrong as they died. We all have a responsibility now to take that knowledge of what's gone so wrong and use the technology currently available and not merely suggest it or recommend it, but rather demand that solutions be implemented to prevent further loss of life.

There may be cost associated with these changes. But I can assure you, that whatever the cost in dollars and cents, it cannot possibly compare with the cost of losing the most precious and treasured person in our lives—our children.

This experience leaves you physically, emotionally and even for a time, spiritually bankrupt and it is a very very long process toward becoming an intact human being again. Please, if you will, help me to prevent others from ever having to know this journey of grief. It is like no other. I would consider it a privilege to be a partner in those efforts. The work and commitment of Safe Kids, of Congresswoman Schultz, and of the CPSC has been an inspiration to me. As well and always, I too am inspired by the goodness and spirit of this child named Graeme and her loving and supportive sisters, my daughters.

Thank you so very much for the opportunity to testify. I'm so sorry, I've run over. I do so hope that I have been able to convey to you the importance of your time and energy in examining pool and spa safety. Thank you.

[The prepared statement of Ms. Baker follows:]

PREPARED STATEMENT OF NANCY BAKER, POOL AND SPA SAFETY ADVOCATE

My name is Nancy Baker. It is my pleasure to testify before the Senate Consumer Affairs, Product Safety, and Insurance Subcommittee today and I thank you for allowing me to address the important topic of pool and spa safety. Although it is a

great privilege to be given the opportunity to speak, I am so very sorry for the circumstances that have brought me here. In June of 2002, nearly four years ago, my seven-year-old daughter—one of a set of twins—lost her life in a spa. Her death has brought me here, with both a deep sense of regret and a deep sense of duty to communicate to you how critical it is for the Federal Government to intervene in a situation which is costing this country hundreds of young lives each and every year. And it is a fact that the vast majority of deaths in pools and spas are preventable. I have come here to impress upon you the enormous cost of losing a child to drowning and to plead with you to give thoughtful consideration to what the government must do to assist in reducing the number of lives lost in drowning accidents.

On a magnificent Saturday afternoon I attended a pool party with my five daughters, being held in honor of a large group of soon to be high school graduates. My oldest child was one of them. My three youngest children entered the pool when we arrived. All of them had been swimming unassisted for at least four years, were members of our neighborhood swim and dive team and had grown up with a pool in their own back yard. I stood on the pool deck at this event, providing what I then thought was sufficient supervision for my children. At one point I realized that only two of mine were in the water and after scanning the pool—made an assumption that one, named Graeme, had gone inside the home we were visiting. There were many people both in and around the water, there was music and food and distraction. There was no lifeguard, nor any one person whose sole job was to watch the water.

Moments later my eleven-year-old daughter came running from one end of the pool towards me, with terror, horror, in her eyes. She told me that her sister Graeme was in the hot tub. I ran with her to the edge of this hot tub, which was directly connected to the pool itself and accessible from the shallow end through a small opening in the edge of the pool. Looking down I saw nothing but dark and bubbling water. She insisted that Graeme was there, frantically crying and pointing into the tub. I jumped in, put my head underwater and what I saw is beyond what I can describe. Her eyes were pinched closed, her hair and limbs moving with the current of the water from all the jets on the side. I tried to pull her up, I pulled with all of my strength, and in the confusion and panic, I could not raise her up. I remember thinking that she had been murdered, that someone had attached her to the bottom somehow—it seemed the only viable explanation for why I couldn't get her up to the surface. I dove down, again and again, screaming for help until finally I gave up and ran to a grassy area adjacent to the deck and just collapsed in agony. I truly, in those moments just lost my mind in fear, confusion and the horror of what was unfolding. I perceived everything in this strange slow motion and I lost the ability to hear. I only recall Graeme's twin telling me that she had found her underwater, but that she was just pretending, so everything would be alright. Oh, how desperately I wished that to be true. But by that time two adults had brought her out and they were rolling her from side to side, attempting to provide CPR to her. People were surrounding me, they had brought the young girls to me and put them in my lap to stop them from running over to their sister's side. Finally, paramedics arrived and I was reassured that Graeme's heart was beating, that there was hope. She was flown to the hospital and I was told I'd be driven there to meet her. When I arrived, I was taken into a small room in the emergency department. I was still wet, wrapped in a blanket which I used to cover my head. I wanted to disappear and deny that all of this was happening. Shortly after I heard the door open, and I could see from under the blanket many feet. And I heard a voice say the impossible. That my daughter, Graeme, was gone and that they had done everything they could to revive her. It was a moment that ended many lives, as for me and my family there was one life we knew before her death and quite another that we have lived since. I was asked if I wanted to see her, and in truth, I was almost too frightened to know how to answer that question. It had never, ever crossed my mind that I would one day be asked if I desired to see my child's body. I did, and I am grateful for those moments that I was able to hold her one last time, to rock her in my arms and to say goodbye in such a painful way. I look to the day when I am with her again.

Graeme died because she became entrapped, pinned underwater, on the drain of the spa she was playing in. Her body was held there by hundreds of pounds of suction force. It took two adults to pull her off of this drain, the force so great that the cover of the drain cracked in half removing her. Over the days and months since her death I have come to accept that she is gone. I cannot, however, accept the circumstances that took her life. This spa had been serviced by pool professionals the day before my daughter swam in it. It was considered to be in working order. In fact, this spa posed a tremendous hazard as do spas and pools around this country today. There were voluntary guidelines that had been issued by the CPSC at this

time, but none of the recommendations that were outlined in those guidelines were in place in the spa where she died. Nor was there anything to compel the homeowners, or service company, to insist that those safety measures be installed. And because of the voluntary nature of those guidelines this beautiful, healthy, magnificent little girl found herself, in horror and panic, with her buttocks pinned at the bottom of this spa, unable to come up for air. I have since discovered that this has been occurring for decades, dozens of stories, one more gruesome and tragic than the next. In August of 2000, a twelve-year-old boy drowned after being sucked, head-first into an intake pipe in a resort swimming pool, requiring six hours to remove him after the pump had been shut down. In that same month a ten-year-old died three days after his fingers were caught in the drain of his family's whirlpool spa. In February of 1996, in Florida, a six-year-old was sucked into the drain of a spa. When the father freed him, he also brought up a chunk of concrete and the drain cover still attached to the child's stomach. What is critical to realize is that in these instances, the pools were in compliance with the local building codes at the time. Therefore, I am here as a parent of one of these victims to beg of you to please exert the influence you have and insist that the codes within these states be examined and written to require that certain measures be taken to end these deadly accidents. Were pools and spas required to have multiple drains the suction force at each one would be lessened, provided neither were blocked by debris or objects. Were anti-entrapment drain covers used to replace the flat grate covers which were and still are used to cover drains, it would be more difficult for a body part to seal the drain—not impossible—but less likely. And, lastly, if a device called a safety vacuum release system were installed the pump would automatically shut off, releasing a victim should an entrapment occur. Each of these layers is meant to provide protection should the prior one fail for any reason. And this is the answer to the danger of entrapment. Were these the standard, as the International Building Codes have adopted, entrapments would cease to occur. Yet we face a situation in this country where the pool and spa industry resists the layers of protection that are needed to prevent entrapment. I have read articles indicating that due to the relatively small number of children who suffer death and injury that entrapment is not a serious threat and therefore does not warrant a shift in building and maintenance practices. Furthermore, the industry has undertaken intense lobbying efforts throughout the United States urging that local building code officials NOT adopt these layers of protection modeled after International Building Codes. My family and I applaud and fully support the legislation that Congresswoman Debbie Wasserman Schultz is introducing in the House of Representatives, as it is intended to provide incentives for the states to provide safe building codes consistent with the recommendations of the independent International Building Codes. Entrapment is a mechanical problem, not an "accident." It has an explicit solution which, if implemented, will save young lives. When a repairman comes to my home to work on my furnace, or appliance, there are explicit codes that he must follow in order to leave that product working in a way that ensures the safety of the people using it. When a pool is serviced, the codes which guide the work being done leave pools and spas in dangerous conditions, leaving people using them vulnerable to death and injury. We must insist that this practice change, face the very real fact that there is an inherent danger in pools and that there are proven ways to reduce the incidences of drownings. The fourth layer of protection which this legislation calls for is four-sided barrier fencing around pools—isolating the water from the entrances and exits of the home. The vast majority of drownings occur in backyard pools, usually due to a momentary lapse of supervision, where a toddler slips out of the house without a caregiver noticing. Within two minutes of being in the water, that child has nearly drowned and within four, most likely will not survive. As conscientious and responsible as all parents try to be, it is human nature to have momentary distractions and we MUST, as a society, insist that we put something between our children and the water to prevent their access to a great fascination—water. To put this loss of life in perspective I would like to share with you some comparative and tragic statistics. In 2003, there were 482 American soldiers who lost their lives in Iraq. In that same year, 782 children died in accidental drownings. Also, in 2003, 2,408 soldiers were wounded in Operation Iraqi Freedom. In 2004, approximately 3,700 children were treated in emergency rooms for near-drownings. Roughly half of these deaths and injuries occurred in pools and spas. With the compassion and attention that we give all loss of life, I ask each of you to please seriously consider supporting measures which will significantly reduce drowning accidents. The numbers, the emotional and medical cost, the collective heartbreak when a child dies is simply too immense to ignore.

In closing, it gives me great hope that this hearing is being held today. From a personal perspective, it is healing to sense that from a loss that has taken such a

tremendous toll on our family that the possibility exists that some good may come from a senseless and utterly preventable death. I have faith that my angel, Graeme, is helping to urge us along. I am certain that she gives me the strength to go on without her, but always on behalf of her and the others whose lives were cut short in this way. Those children knew that something was terribly, terribly wrong as they died. We all have a responsibility now to take that knowledge of what has gone so wrong and use the technology now available and not merely suggest it, or recommend it, but rather demand that solutions be implemented to prevent further loss of life. Yes, there will be cost associated with these changes. But I can assure that whatever the cost in dollars and cents, it cannot possibly compare with the cost of losing that most precious and treasured person in our lives, our children. This experience leaves you physically, emotionally and even, for a time, spiritually bankrupt and it is a very long process toward becoming an intact human being again. Please, if you will, help me to prevent others from ever having to know this journey through grief. It is like no other. I would consider it a privilege to be a partner in those efforts. The work and commitment of Safe Kids, of Congresswoman Wasserman Schultz and of the CPSC has been an inspiration to me. As well, and always, I too am inspired by the goodness and spirit of my child, Graeme, and her loving and supportive sisters. Thank you so very much for this opportunity to testify here today. I do so hope that I have been able to convey to you, on a personal level, how very important your time and attention to pool and spa safety is.

Senator PRYOR [presiding]. Thank you, Ms. Baker. I appreciate your testimony and your commitment on this issue. Mr. Laven?

**STATEMENT OF MARK LAVEN, PRESIDENT/CEO, LATHAM INTERNATIONAL; ON BEHALF OF THE ASSOCIATION OF POOL AND SPA PROFESSIONALS (APSP)**

Mr. LAVEN. Thank you. Chairman Allen and distinguished Members of the Subcommittee, my name is Mark Laven. I'm President and CEO of Latham International, the leading manufacturer of in-ground swimming pools in North America. Latham is a 50-year-old company with 1,200 employees at 20 manufacturing locations in the United States and Canada. Like many in the pool and spa industry, I am a third-generation member of my family to be associated with the company and with the industry. And in many ways, we are a family-oriented industry.

Today, I am testifying on behalf of The Association of Pool and Spa Professionals, APSP, the international trade association of the pool and spa industry. In this regard, when I use the term we, I am referring to APSP and the industry as a whole, not my company. We, collectively, thank the Subcommittee for holding this hearing, highlighting the critical importance of pool safety, particularly during National Safe Kids Week. We have participated in events sponsored by Safe Kids Worldwide and others to educate caregivers on pool safety measures. Safety is a core belief and commitment of this industry, and we appreciate the opportunity to participate here today.

Our industry touches millions of people. In this country alone, there are approximately 4.7 million in-ground pools, many with adjoining spas, 3.6 million above-ground pools, and 5.4 million portable hot tubs in use today.

Briefly, APSP, formerly known as NSPI, or the National Spa and Pool Institute, is headquartered in Alexandria, Virginia, and has approximately 4,500 members, largely in North America. Its members are comprised of pool, spa, and equipment manufacturers, builders, distributors, retailers and service companies, and their employees. Associated members include public health officials,

building code officials, and others with an interest in the pool and spa industry, and aquatics in general. Membership is voluntary, but all members agree, by a Code of Ethics, "to contribute to the health, safety and welfare of the public in the installation, maintenance and operation of swimming pools, spas, and hot tubs, and to comply with applicable laws, and ordinances, and regulations."

Since its inception, APSP has been committed to promoting the safe and enjoyable use of pools and spas, as have many of its members, including my own firm, Latham International. In this statement, I'd like to summarize how we carry out this commitment. Additional detail is provided in the Appendix we have submitted for the record.

APSP and the industry promote safety by advocating widespread use of pool and spa standards approved by ANSI, the American National Standards Institute, and by education, training, and disseminating safety information.

Currently, APSP and the industry support comprehensive pool and spa construction and design standards. These standards are developed in accordance with the rigorous third-party consensus review process of ANSI. Eight standards are in effect, and one additional standard is pending. A principal purpose of these standards is the prevention of three major concerns of pool safety—drownings, diving accidents, and suction entrapment.

The ANSI standards are continually reviewed and revised to reflect new methods and technologies that enhance safety. We advocate their widespread use within the industry and we continue to promote their adoption by state and local officials. We emphasize safety in many educational settings, at national and local levels both within and beyond the industry. APSP has developed comprehensive educational materials and offers training and certification in both pool construction and servicing.

Recognizing the critical need to deliver safety information directly to pool and spa owners and parents, APSP's awareness and public awareness outreach programs provide a wide array of brochures and publications with titles like: "Important Safety Information" and "Children Aren't Waterproof." All of these are available to the public at no charge by calling 800–323–3996, which is APSP's toll-free consumer contact number.

In addition, four related APSP websites further extend safety outreach to the public. *TheAPSP.org, PoolPeopleUSA.com* and *HotTubLiving.com* all contain important safety information and a special site for kids, *SplashZoneUSA.com,* teaches water safety with online fun and games. Safety is highlighted in TV and radio public service announcements as well.

Many companies within the industry, including my own, emphasize safety repeatedly through their own websites, company training, and customer education programs, publications, sales literature, product packaging, and safety signage.

Of course, the purpose of these efforts is to prevent accidents and fatalities from occurring. It would be ideal if we could guarantee safety in all instances. In reality, we cannot; no industry can make that guarantee. For example, all the precautions in the world will not protect an intoxicated person who dives recklessly, head first, into the shallow end of a pool. Statistics do tell us, however, that

while pool and spa use is rising, the rate of drownings is declining, and we believe that public awareness education is a major contributing factor. However, this is no comfort when a tragic loss occurs. Our goal remains to help make sure that each and every person who uses pools, does so safely.

Finally, I'd like to conclude with a few comments about safety products, devices, and methods. Our industry is young and vibrant. New ideas for safety products and features are being developed all the time.

To mandate any one device or method has the potential to create a false sense of security and to freeze one solution in place at the expense of new and better alternatives that may become available. Consumers must be allowed to benefit from safety innovation.

Moreover, a safe pool environment involves many factors, in combination, and one size does not fit all when it comes to responsible pool ownership.

Mr. Chairman, for decades swimming has remained the most popular form of exercise and recreation in America. Pools and spas are like many things we use and enjoy everyday. Built, maintained, and used properly, they are tremendously beneficial. However, built, used, or maintained improperly, they can be dangerous. Safety is critical to our industry and will always be our utmost concern. We will continue to work to promote, and to work with others to promote pool and spa safety.

Thank you, Mr. Chairman. I look forward to responding to any questions you or other members of the Subcommittee may have.

[The prepared statement of Mr. Laven follows:]

PREPARED STATEMENT OF MARK LAVEN, PRESIDENT/CEO, LATHAM INTERNATIONAL; ON BEHALF OF THE ASSOCIATION OF POOL AND SPA PROFESSIONALS (APSP)

Chairman Allen and distinguished Members of the Subcommittee:

My name is Mark Laven, President and CEO of Latham International, the leading manufacturer of in-ground swimming pools in North America. Latham is a 50-year-old company with 1,200 employees at 20 manufacturing locations in the U.S. and Canada. Like many in the pool and spa industry, I am the third generation of my family to be associated with my company, and with the industry. In many ways, we are a family-oriented industry.

Today, I am testifying on behalf of The Association of Pool and Spa Professionals, APSP, the international trade association of the pool and spa industry. In this regard, when I use the term "we," I am referring to APSP and the industry as a whole, not my company. We, collectively, thank the Subcommittee for holding this hearing, highlighting the critical importance of pool safety, particularly during National Safe Kids Week. We have participated in events sponsored by Safe Kids Worldwide and others to educate caregivers on pool safety measures. Safety is a core belief and commitment of this industry, and we appreciate the opportunity to participate here today.

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**ANSI-Approved Pool and Spa Standards**

Currently, APSP and the industry support comprehensive pool and spa construction and design standards. These standards are developed in accordance with the rigorous third-party consensus review process of ANSI. Eight standards are in effect, and one additional Standard is pending. A principal purpose of these standards is the prevention of three major concerns of pool safety—drownings, diving accidents and suction entrapment.

The ANSI standards are continually reviewed and revised to reflect new methods and technologies that enhance safety. We advocate their widespread use within the industry, and we continue to promote their adoption by state and local officials.

**Education and Safety Information**

We emphasize safety in many educational settings, at national and local levels both within and outside of the industry. APSP has developed comprehensive educational manuals and offers training and certification in both pool construction and servicing.

Recognizing the critical need to deliver safety information directly to pool and spa owners and parents, APSP's consumer awareness and public outreach programs feature a wide array of brochures and publications, with titles like "Important Safety Information" and "Children Aren't Waterproof." All of these are available to the public at no charge by calling 800–323–3996, APSP's toll-free consumer contact number.

Four related APSP websites further extend safety outreach to the public. *TheAPSP.org*, *PoolPeopleUSA.com* and *HotTubLiving.com* all contain important water safety information, and a special site for kids, *SplashZoneUSA.com*, teaches water safety with online fun and games. Safety is also highlighted in TV and radio public service announcements.

Many individual companies within the industry, including my own, emphasize safety repeatedly through our own websites, company training and customer education programs, publications, sales literature, product packaging and safety signage.

Of course, the purpose of all these efforts is to prevent accidents and fatalities from occurring. It would be ideal if we could guarantee safety in all instances. In reality, we cannot; no industry can make that guarantee. For example, all the precautions in the world will not protect an intoxicated person who dives recklessly, head-first, into the shallow end of a pool. Statistics do tell us, however, that while pool and spa use is rising, the rate of drownings is declining, and we believe that public awareness education is a major contributing factor. However, this is no comfort when a tragic loss occurs. Our goal remains to help make sure that each and every person who enjoys the use of pools and spas does so safely.

Finally, I'd like to conclude with a few comments about safety products, devices and methods. Our industry is young and vibrant. New ideas for safety products and features are being developed all the time.

To mandate any one device or method has the potential to create a false sense of security and to "freeze" one solution in place at the expense of new and better alternatives that may become available. Consumers must be allowed to benefit from safety innovation.

Moreover, a safe pool environment involves many factors, in combination, and "one size does not fit all" when it comes to responsible pool ownership.

Mr. Chairman, for decades swimming has remained the most popular form of exercise and recreation in America. Pools and spas are like many things we use and enjoy everyday: built, maintained and used properly, they are tremendously beneficial; however, built, used or maintained improperly, they can be dangerous. Safety is critical to our industry and will always be our utmost concern. We will continually work to promote, and work with others to promote pool and spa safety.

Thank you, Mr. Chairman. I look forward to responding to any questions you or other members of the Subcommittee may have.

APPENDIX

In his statement, Mr. Laven states that the pool and spa industry promotes safety through advocating ANSI-approved industry standards and through multiple safety education and communication initiatives. This Appendix provides additional information about these initiatives.

**The ANSI Standards**

Utilizing the process of the American National Standards Institute (ANSI), the APSP (formerly NSPI, the National Spa and Pool institute) has sponsored the development of a number of industry standards relating to public pools, residential inground and aboveground pools and spas and hot tubs. APSP promotes the development of consensus standards, but does not, itself, write the standards. At one point, APSP formed the International Aquatic Foundation (IAF) with the intention that the Foundation would house the standards initiatives, but all standards initiatives now reside in APSP itself.

Attached are two examples of the standards:

- *The ANSI/IAF–8 2005 American National Standard Model Barrier Code for Residential Swimming Pools, Spas and Hot Tubs*. The purpose of this Standard is to establish layers of protection, such as fencing, to supplement adult supervision in denying, delaying or detecting unsupervised entry to a pool or spa by the most at-risk age group, children less than five years of age.*
- *The BSR/IAF–7 Draft Standard For Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins*. This draft standard, currently in the ANSI public review process, consolidates and updates all the provisions pertaining to suction outlet entrapment avoidance that currently are contained in each of the other standards. *

(Draft standards in the process of public review are referred to as "BSR," the Board of Standards Review of ANSI.)

In addition to these two standards, one in effect and one pending, the remaining standards currently in effect are:

- ANSI/NSPI–1 2003 American National Standard for Public Swimming Pools.
- ANSI/NSPI–2 1999 American National Standard for Public Spas.
- ANSI/NSPI–3 1999 American National Standard for Permanently Installed Residential Spas.
- ANSI/NSPI–4 1999 American National Standard for Aboveground/Onground Residential Swimming Pools.
- ANSI/NSPI–5 2003 American National Standard for Residential Inground Swimming Pools.
- ANSI/NSPI–6 1999 American National Standard for Residential Portable Spas.
- ANSI/IAF–9 2005 American National Standard for Aquatic Recreational Facilities.

Pursuant to ANSI requirements, all standards are routinely updated.

The APSP continually communicates with state and local code officials and the International Code Council (ICC) in an effort to codify these ANSI-approved pool and spa standards into appropriate laws or regulations. This has resulted in the inclusion of the existing standards as appendices to current and prior editions of the International Residential Code (RC).

Twenty states directly reference all or portions of one or more of these standards in their state codes. The IRC has been adopted in thirty-three states and in fourteen other states at the local level.

Further information about the standards and ANSI is available at *www.ANSI.org*. Further information about the International Code Council is available at *www.ICCSafe.org*.

**Education and Safety Information**

The APSP and the industry routinely and affirmatively emphasize safety through multiple educational and communication initiatives, both for the industry and the general public. Examples include:

- Comprehensive educational manuals, training and certification programs for pool and spa construction and servicing.

* The information referred to has been retained in Committee files.

- APSP continuing education seminars and programs at the national, regional and local chapter levels.
- TV and radio public service announcements which reach approximately 100 million people.
- The APSP website, *www.TheAPSP.org* which links users. the public and the industry to free safety brochures and information.
- Linked websites promoting safety, such as *www.PoolPeopleUSA.com*; *www.HotTubLiving.com*; and *www.SplashZoneUSA.com* (which is directed specifically to children).
- APSP brochures, such as "Important Safety Information," "Children Aren't Waterproof," "Layers of Protection," and "The Sensible Way to Enjoy Your (Inground Pool/Aboveground Pool/Spa or Hot Tub)," which are obtained in hard copy or through the APSP website. Each year over a million of these brochures are placed in the hands of consumers.
- The APSP maintains a toll-free number (800–323–3996) where industry and the public can access free consumer information brochures.
- Numerous programs by individual firms within the industry aimed at educating their dealers and customers on safety issues.
- Manufacturer, dealer and builder customer information packages that communicate directly to pool owners and users through APSP brochures, manuals and signage.

The APSP has and will continue to work on improving pool and spa safety and public awareness with the Consumer Products Safety Commission (CPSC), American Red Cross, Centers For Disease Control and Prevention (CDC), Safe Kids Worldwide, National Drowning Prevention Alliance, National Sanitation Foundation (NSF), World Waterpark Association, The National Swimming Pool Foundation (NSPF), Underwriters Laboratory (UL), National Fire Protection Association (NFPA), The American Society of Testing and Materials (ASTM), American Society of Mechanical Engineers (ASME), National Environmental Health Association, American Public Health Association (APHA), American Hotel and Lodging Association, National Recreation and Parks Association, and numerous state and local public safety officials. Many of these groups have participated in the ANSI review process for the ANSI/APSP standards.

Senator PRYOR. Thank you.

**STATEMENT OF HON. TED STEVENS, U.S. SENATOR FROM ALASKA**

The CHAIRMAN. Senator, if I may——

Senator PRYOR. Yes.

The CHAIRMAN.—interrupt before Mr. Korn—as Chairman of the Full Committee, I think I speak for myself and Senator Inouye, we're looking forward to seeing the Congresswoman's bill and we hope that we'll see it soon. I can assure everyone interested, that we are going to give full consideration to a bill on—regarding this issue, as soon as we can get one before us.

I spent some of my younger years as a lifeguard on the beaches and at swimming pools. And I can tell you, I'd rather be at a beach anytime. The pool is enough to make anyone a nervous person. But I do think that much more can be done to improve the safety of these pools and I think that we ought to take the lead in setting forth some real standards for the construction design. I look forward to working with the Consumer Product Safety Commission on this and the two of you, as Chairman and Ranking Member of the Subcommittee. But I do believe we should take some action and we should really set some real standards for the Commission and for the industry to understand that particularly the deaths of young children resist—they can be avoided and I believe that we should

take action to assure that their—to the maximum extent, they are avoided. Thank you very much.

Senator ALLEN [presiding]. Thank you. I consider you still a Chairman. No matter what, he is the Chairman. That this is the Subcommittee, that he's the Chairman of the whole committee and thank you, Mr. Chairman——

The CHAIRMAN. Thanks.

Senator ALLEN.—for being here and for your great leadership on so many fronts. Now, we'll go to Mr. Korn, as far as your testimony is concerned.

**STATEMENT OF ALAN KORN, J.D., DIRECTOR OF PUBLIC POLICY/GENERAL COUNSEL, SAFE KIDS WORLDWIDE**

Mr. KORN. Mr. Chairman, Senator Pryor, thank you for holding this hearing and for giving Safe Kids Worldwide the opportunity to testify. One can't hear the Baker family story without asking what we can do. In fact, it was Nancy's story and her personal visit to our office that first motivated us to do more and do more formally during Safe Kids Week which starts next week.

Don't get me wrong, we want kids to enjoy the summer in our nation's pools, but we can't throw caution to the wind. There are dangers associated with pools and spas. You've heard the numbers, I won't repeat them here. Suffice it to say, far too many children are dying or being permanently injured from a near drowning. Senator Pryor, you mentioned earlier, about three deaths in the past 2 weeks. It's actually nine deaths in the past 2 weeks and I have the clippings here.

The vast majority of these deaths were due to children having unfettered or very easy access to pools or spas. Or, as a result of adults not properly supervising children while swimming. But swimming pools and spas present, as you've heard, a hidden danger: drain entrapment, hair entanglement, and evisceration. These types of entrapments occur when a part of the child becomes attached to the drain because of the powerful suction of the pool or spa's water circulation system. This risk, unlike the more common form of drowning described earlier, has nothing to do with the lack of proper adult supervision, but has everything to do with the flaws in the way pools are built and maintained in this country.

From 1985 to 2004, about 36 children have died and about 100 have been seriously injured. And these are permanent serious injuries. This isn't like falling off of a bike, like breaking an arm, a stitch, these are brain—serious permanent brain damage.

However, and Senator Allen, you mentioned earlier, we believe the numbers of entrapment deaths could be much higher because the deaths or injuries, as it relates to entrapment, are often misclassified. For example, on Graeme Baker's death certificate, the cause was listed as drowning only, with no mention of the mechanism of the fatality. Safe Kids believes that this type of incomplete mis-characterization happens more often than not, and therefore the actual incidents are much higher.

I'll lift my head up from my prepared notes to talk about this next concept of layers of protection. We've heard a lot about them and I think it is important to kind of see, touch, and feel them as we move forward.

The first is the isolation fencing. I think everyone's in agreement that pools should have barriers that prevent the unfettered access to children getting into pools, neighbors' pools, or your own pools—isolated fencing around the pool. In fact, our view of the newspaper clippings, not a scientific review, determined that all but one of those deaths in the past 2 weeks could have been prevented by appropriate fencing with self-locking gates, where children—small children, as young as two and in one case, of twins. A family, just on Sunday or Saturday, lost twins, two 4-year-olds, by getting access to a pool. We think four-sided fencing with self-latching gates, is an important component to that.

The second layer of protection, is what you've heard, addresses the entrapment. And let me just show you, just by way of a visual. This is a drain that you find in many pools in the country and spas. It's flat. It also has the grate. And what happens is a part of the body gets attached to the drain. The powerful suction holds you down and you can't break the seal. This is what happened to Graeme Baker. Also, the hair can get caught in the grates, getting tangled, and you can't pull yourself free. A dangerous drain.

Well, we prefer part of the layer of protection that you heard the Consumer Product Safety Commission talk about, which is called an anti-entrapment drain. And you can see, it's engineered a little differently. It's dome-shaped. This is not the only one, there are other ones out there. But they are designed to prevent that seal from happening in the first place, so you don't have the entrapment at the bottom of the pool.

Third, fences, drain covers, and safety vacuum relief system. It is safety vacuum and release systems and I have one right here. A little cumbersome, but you can see what they look like. And this automatically shuts off the pump, the circulation system, if it detects an unnatural blockage or any blockage in the drain at the bottom of the pool.

Usually panicked family members—we have a witness who can speak better to that—run, panicked, searching for how to turn off the mechanism and they can't. This automatically does it. In fact, there's a family sitting in the audience who had a daughter die in a pool at a hotel. They had to shut off the electricity in the hotel in order to break the seal. So, this automatically does that. It's a passive safety device, which I think is an important concept.

The other, which has been talked about pretty extensively and I won't spend too much time on it, is dual drains. Obviously, multiple drains—the more drains you have at the bottom of the pool, the less source suction you have in each one of those pools. So, at least moving forward, it is an expensive fix, by the way. But at least, moving forward for new pools, dual drains are a very important concept to consider.

We would be remiss if we didn't talk about, on top of the environmental precautions, active supervision. Because really, this is a very important component and a focus for us in addition to these layers. We believe in fact, this is one of the most important prevention steps to address the most common type of pool drowning and that's adult supervision—active adult supervision. Unfortunately, many parents do not realize the importance of active adult supervision at all times. Active supervision means that a parent or care-

giver is giving undivided attention to a child and is close enough to help in case of emergency.

Previous research that we've done revealed that 9 out of 10 children who drown in pools are being supervised and as you might expect, that supervision was inadequate. It's one of those cases, Senators, where you have everybody watching the pool, but nobody's really watching the pool.

We're going to be distributing this week with our partner, Johnson & Johnson, during Safe Kids Week, water watcher cards. I've seen this work. I'm going to use it myself this summer. When you're at a pool, pool party, at a summer camp, enjoying a graduation party that's about to start, you assign parents to wear a water watcher card. And you just slip it around your neck and it changes the feel around the pool. Then you've got two or three adults standing by the pool, who are completely focused on what's going on at the pool. You're not conflicted by the music, or the barbeque, or the socializing. And then 15 or 20 minutes later, you take it off, and you exchange, and it adds that layer of responsibility there. I've seen it used. I plan on using it myself when my 6-year-old is enjoying the summer fun in pools.

I do want to spend a second talking about the bill that's about to be introduced in the House. Safe Kids will strongly support this bill introduced by Congresswoman Debbie Wasserman Schultz. It's called the Pool and Spa Safety Act. And it's intended to increase the safety of swimming pools and spas by motivating states that pass laws that incorporate these layers of protection. If enacted, the legislation would provide incentive grants, Senator Allen mentioned this, to states that call for all swimming pools and spas to have the layers of protection we talked about here.

Congressional incentives—Congressional Incentive Grants to encourage states to pass safety legislation is not a new concept. Congress has used this mechanism often to promote state transportation safety laws, some of which, were included in the most recent SAFETEA–LU legislation. In fact, I think these incentive grants originate in the Commerce Committee as a way to motivate states to input safety behaviors.

Safe Kids believes that the Pool and Spa Safety Act, which will be introduced next week, could do for pool safety what incentive grants have done for booster seat laws, primary enforcement seat belt laws, .08 drunk driving laws, and open container prohibition laws—that incentivizing of states to do the right thing.

We would hope that we could find a companion bill in the Senate. We're happy to continue the discussion, as you say, Senator Allen, at least educating the Committee about these issues.

We hope this hearing and the attention surrounding our Safe Kids Week will be a catalyst to continue this discussion. I can rest assured, we will be continuing, not only throughout this summer, but into the future addressing swimming pool safety to make sure that it is a fun time for all as they enjoy swimming in the pools. So, thank you very much Senator, both of you.

[The prepared statement of Mr. Korn follows:]

PREPARED STATEMENT OF ALAN KORN, J.D., DIRECTOR OF PUBLIC POLICY/GENERAL COUNSEL, SAFE KIDS WORLDWIDE

My name is Alan Korn, and I am the Director of Public Policy and General Counsel for Safe Kids Worldwide. It is my pleasure to testify before the Senate Consumer Affairs, Product Safety, and Insurance Subcommittee today. Mr. Chairman and Senator Pryor, thank you for allowing me to address the important topic of pool and spa safety, as drowning is a leading killer of children ages 14 and under.

**I. History of Safe Kids Worldwide**

Safe Kids Worldwide is the first and only international organization dedicated solely to addressing an often under recognized problem: *More children ages 14 and under are being killed by what people call "accidents" (motor vehicle crashes, fires, drownings and other injuries) than by any other cause.* Formerly known as the National SAFE KIDS Campaign, Safe Kids Worldwide unites more than 450 coalitions in 16 countries, bringing together health and safety experts, educators, corporations, foundations, governments and volunteers to educate and protect families against the dangers of accidental injuries.

Founded in 1987 by the Children's National Medical Center and with support from Johnson & Johnson, Safe Kids Worldwide relies on developing injury prevention strategies that work in the real world—conducting public outreach and awareness campaigns, organizing and implementing hands-on grassroots events, and working to make injury prevention a public policy priority.

The ongoing work of Safe Kids coalitions reaching out to local communities with injury prevention messages has contributed to the more than 40 percent decline in the childhood unintentional injury death rate during the past 15 years. However, with one out of every five children—or nearly 12 million children ages 14 and under—sustaining injuries serious enough to require medical attention each year, Safe Kids Worldwide remains committed to reducing unintentional injury by implementing prevention strategies and increasing public awareness of the problem and its solutions.

**II. The Problem: Accidental Childhood Drowning in Swimming Pools and Spas**

While water recreation provides hours of enjoyment and exercise for children, water and children can be a deadly mix when an unsafe environment or inadequate supervision is also present. In the United States, drowning remains the second leading cause of accidental injury-related death among children ages 1 to 14 and the leading cause of accidental-injury-related death among kids ages 1 to 4. In 2003, 782 children ages 14 and under died as a result of accidental drowning, and in 2004, an estimated 3,702 children in this age group were treated in emergency rooms for near-drowning, which often results in lifetime injuries, including permanent brain injuries. Of these drowning deaths, an estimated forty percent occur in pools. The vast majority of these deaths were due to children having unfettered or very easy access to pools/spas or as a result of adults not properly supervising children who were in the pool with permission. (For more statistics, see Attachment A: Backgrounder on Pool and Spa Safety.)

Swimming pools and spas also present a hidden danger for children (and adult bathers and swimmers): the risk of drain entrapment. Entrapment occurs when part of a child becomes attached to a drain because of the powerful suction of a pool or spa's water circulation system. This happens much the same way one's hand might get stuck to the hose end of a vacuum cleaner. Young children are captivated with the suction created by a pool or spa circulation system, often playing in the suction path to feel the powerful pull of the water. This is often referred to as an "attractive nuisance." That "nuisance" is magnified by the lack of awareness by most consumers (especially children) and the aging of pools in this country. Death or serious injury can occur when the force of the suction overpowers the child's ability to disengage from the drain and rise to the surface of the water. Often, the strength of an adult is still not enough to remove a child trapped by a pool or spa's drainage system. This risk, unlike the more common form of drowning described above, has nothing to do with the lack of proper adult supervision, but has everything to do with engineering flaws in the way pools are built and maintained.

There are at least five different types of suction entrapment:

1) Body Entrapment—where a suction of the torso becomes entrapped;

2) Limb Entrapment—where an arm or leg is pulled into an open drain pipe;

3) Hair Entanglement/Entrapment—where hair is pulled in and wrapped around the grate of a drain cover;

4) Mechanical Entrapment—where jewelry or part of a bathing suit becomes caught in the drain or grate; and

5) Evisceration—where the victim's buttocks comes in contact with the pool suction outlet and he/she is disemboweled.

Each of these "entrapments" almost always results in death or permanent serious injury.

From 1985 to 2004, records show that at least 33 children ages 14 and under died as a result of pool and spa entrapment, and nearly 100 children were seriously injured. Entrapment deaths can also occur when a child's hair or swimsuit gets tangled in the drain or on an underwater object, such as a ladder. Forty-one percent of the deaths were hair-related entrapments. Fifty-two percent of these fatalities occurred in spas or hot tubs, thirty-nine percent in swimming pools, and nine percent in combination pool/spas.

However, according to the U.S. Consumer Product Safety Commission (CPSC) and Safe Kids Worldwide, the number of entrapment deaths could be much higher than reported. Due to the fact that entrapment is a little-known risk for drowning, it is possible that many drowning deaths have not been classified as entrapment and that the number of deaths is probably higher than reported. For example, in the case of Nancy Baker's daughter and former Secretary of State James Baker's granddaughter, Graeme's cause of death was listed as a "drowning" only with no mention of the mechanism of the fatality on the death certificate. Safe Kids believes that this type of incomplete characterization happens more often than not, and therefore, the actual incidences of entrapment/entanglement/evisceration is much higher than reported.

As pools and spas become more common among consumers and existing pools and spas age and require maintenance, the potential risk of injuries and deaths from entrapment increases. The number of residential swimming pool owners increased by approximately 600,000 from 2002 to 2004, and the number of residential spa owners increased by about 800,000 over the same period.

Drowning, in all its forms, is usually quick and silent. A child will lose consciousness two minutes after submersion, with irreversible brain damage occurring within four to six minutes. The majority of children who survive without neurological consequences are discovered within two minutes of submersion, and most children who die are found after 10 minutes.

For children who do survive, the consequences of near-drowning can be devastating. As many as 20 percent of near-drowning survivors suffer severe, permanent neurological disability, the effects of which often result in long-lasting psychological and emotional trauma for the child, his or her family and their community. Near-drownings also take a tremendous financial toll on affected families and society as a whole. Typical medical costs for a near-drowning victim can range from $75,000 for initial treatment to $180,000 a year for long-term care. The total cost of a single near-drowning that results in brain injury can be more than $4.5 million. The total annual lifetime cost of drowning among children ages 14 and under is approximately $5.7 billion, with children ages 4 and under accounting for $3.4 billion, or nearly half, of these costs.

## III. The Solution: Layers of Protection and Active Supervision

As a result of these alarming statistics, Safe Kids has promoted two primary ways to prevent pool and spa drownings and entrapments: safety devices to guard the pool and prevent entrapment, and active supervision.

### *A. Use of Environmental Safety Devices: Layers of Protection*

1. Four-Sided/Isolation Fencing

One of the most effective ways to reduce child drownings in residential pools is to construct and maintain barriers to prevent young children from gaining unsupervised access to pools. Studies show that installation and proper use of four-sided isolation fencing could prevent 50 to 90 percent of residential pool drowning and near-drowning incidents among children. Isolation fencing (enclosing the pool completely) is more effective than perimeter fencing (enclosing property and the pool) because it prevents children from accessing the pool area through the house. If the house is part of the barrier, the doors and windows leading to the pool should be protected, at the very least, by an alarm or a powered safety cover for the pool. Safe Kids also recommends that pool fences have a secure, self-closing, self-latching gate and also isolate the pool from the residence. The CPSC has crafted suggested recommendations, entitled *Safety Barrier Guidelines for Home Pools,* which details specifically how pool owners and pool installation companies should construct fencing to best

prevent the unsupervised access to pools by children. Some localities and a few states have used these guidelines as a basis for their own laws.

2. Anti-Entrapment Drain Covers

In addition to the barriers to the water, there are other devices designed specifically to protect against entrapment. Another layer of protection involves the installation of anti-entrapment drain covers. Anti-entrapment drain covers are recommended to help prevent the suction from drawing the body or hair into the drain. Anti-entrapment drain covers are not flush to the bottom of the pool or spa, like many dangerous grates and outlet covers in pools/spas today. Anti-entrapment covers are drain fittings that are specifically designed to prevent the circular or swirling motion of the water that tends to form a vacuum or suction and draws hair or the body into the drain pipe. Safe Kids recommends that pool owners (both private owners and commercial operators) have their pools/spas inspected by pool maintenance professionals for dangerous or broken covers and have them replaced with safer covers before pools/spas are used for the summer. These drain covers have a retail price of approximately $30–$60.

3. Safety Vacuum Release Systems

Safety vacuum release systems (SVRS) are intended to detect any blockage of a drain, automatically and immediately shutting off the suction to prevent entrapment. This immediate shut off feature eliminates the need for a witness to an entrapment, usually a panicked family member, from searching around for the on/off switch to turn off the pool pump. The search costs precious seconds and usually by the time the switch is found, it is too late. These safety devices have a suggested retail price between $375–$800.

4. Dual Drains

To ensure a safe environment, Safe Kids advises pool and spa owners to install multiple drains, not just one, in order to decrease the amount of suction at the drain site. Although this safety adaptation is admittedly costly and labor intensive for existing pools since the bottom of the pool would have to be dug up, this safety feature should be a part of the construction for all new pools and spas being built.

The CPSC recommends each of these safety devices (safer drain covers, SVRS and dual main drains) as a way to reduce the risk of entrapment, entanglement and evisceration.

See the CPSC's *Guidelines for Entrapment Hazards: Making Pools and Spas Safer* (March 2005).

Safe Kids also believes that pool service companies, and in particular, their technicians, need to be better educated about these "layers of protection" and should more regularly inform pool owners and operators about these important environmental changes and safety devices. The pool service visit each May should not only include preparing the pool for the summer's activities, but should also include an inspection for these hidden hazards and installation of the appropriate layers of protection.

*B. Active Supervision of Children*

In addition to environmental precautions, parents and caregivers must also actively supervise children whenever water is present. Unfortunately, many parents do not realize the importance of active supervision around water at all times. Active supervision means that a parent or caregiver is giving undivided attention to the child and is close enough to help the child in case of emergency.

In a previous Safe Kids' study, research revealed that nine of out of ten children who drowned were being supervised. Our 2004 study, *Clear Danger: A National Study of Childhood Drowning and Related Attitudes and Behaviors*, showed that in 88 percent of drowning cases reviewed, the victim was under some form of supervision when he or she drowned—in most cases, being supervised by a family member. Forty-six percent of drowning victims were in the care of a parent at the time of the incident. Twenty-six percent were in the care of a relative other than a parent, including 5 percent in the care of a sibling younger than 18 years of age and 6 percent in the care of a grandparent. These results are consistent with past studies indicating that childhood drownings and near-drownings typically occur when a child is left unattended or during a brief lapse in supervision.

In that survey, nearly all parents (94 percent) reported that they always actively supervise their children while swimming. However, deeper examination revealed that parents participated in a variety of distracting behaviors while supervising, including talking to others (38 percent), reading (18 percent), eating (17 percent), talking on the phone (11 percent) and even closing their eyes and relaxing (4 percent).

Safe Kids was alarmed at the disconnect between parents recognizing the potential danger of water activities and their subsequent lack of full attention when supervising their children. As a result of these findings, Safe Kids and its coalitions will continue to promote the proper practice of active supervision, especially as kids are in and around water this summer season.

**IV. Safe Kids' Support of the Pool and Spa Safety Act**

Safe Kids knows that installation of the layers of protection will go a long way to protecting children from the potential dangers of residential and publicly-operated pools and spas. Four states have enacted residential pool fencing laws and no state has a comprehensive pool safety law on its books. Accordingly, Safe Kids strongly supports the enactment of the Pool and Spa Safety Act and applauds Congresswoman Debbie Wasserman Schultz for her leadership in introducing this legislation. We also commend former Secretary of State James Baker and Nancy Baker for sharing their personal story about the loss of Virginia Graeme Baker and for their advocacy efforts in support of this important piece of legislation.

The *Pool and Spa Safety Act* is intended to increase the safety of swimming pools and spas by motivating states to pass laws that incorporate the layers of protection in order to help prevent drowning, entrapment and hair entanglements. If enacted, the legislation would provide incentive grants to states that call for all swimming pools and spas to have the following layers of protection:

- A wall, fence or barrier that entirely encloses the pool;
- Self-closing and self-latching gates for any walls, fences or barriers;
- A drain system that contains two suction outlets per pump (for new pools only);
- A safety suction outlet drain cover that meets the CPSC's guidelines; and
- A safety vacuum release system.

Congressional incentive grants to encourage states to pass safety legislation are not a new concept. Congress has used this mechanism often to promote state transportation safety laws, some of which are included in the recently passed SAFETEA–LU Federal highway law. Safe Kids believes that the *Pool and Spa Safety Act* could do for pool safety what incentive grants have done for booster seat child occupant protection laws, primary enforcement safety belt laws, .08 drunk driving laws and open container prohibition laws.

The bill also has two important industry and consumer awareness/education components. First, the bill would require states to use at least 50 percent of the awarded grant to hire and train personnel to properly enforce the law, and to educate pool construction/installation companies, pool service companies and consumers about the new law and about drowning prevention tips.

In addition, passage of the legislation would enable national public education programs on pool and spa safety to be implemented through the CPSC and partner organizations. The need for this type of consumer awareness program is overwhelming. Safe Kids, in its most recent research, has found that the vast majority of American pool and spa owners do not install many of the recommended devices in and around their pools and spas. The legislation attempts to address this lack of appropriate safety devices. Swimming pool owners would be targeted with information on ways to prevent drowning and entrapment, and educational materials would be designed and disseminated through pool manufacturers, pool service companies and pool supply retail outlets.

Safe Kids hopes that the Senate considers a companion bill to the *Pool and Spa Safety Act.*

**V. Safe Kids Week 2006: Safe Pools for Safe Kids**

As a result of the deaths and injuries due to drowning and entrapment, Safe Kids Worldwide will be launching a water safety initiative, *Safe Pools for Safe Kids,* during Safe Kids Week 2006 (May 6 to 13). National Safe Kids Week has been held annually for 13 years and has been supported each of these years by Johnson & Johnson. This year's theme is Safe Pools for Safe Kids and more than 300 Safe Kids Week events will take place across the Nation to educate parents and pool/spa owners about how to keep kids safe from drowning.

*A. Safe Kids Week 2006 Programmatic Components*

This year our campaign will include the following:

1. Safe Kids Local Community Events

Our national network of 300+ coalitions and chapters will be conducting educational programming efforts to educate parents about pool and spa safety. These

include community safety events at local venues, including schools, neighborhood pools, and home and garden shows.

Many of our Safe Kids coalitions will also be lobbying their state legislatures about the importance of the "layers of protection" and, hopefully, helping to introduce our Safe Kids model pool safety legislation that addresses both traditional drowning incidents and the entrapment risks.

2. Johnson & Johnson's National Advertising Campaign

Through a partnership with Turner Broadcasting, six public service announcements on the importance of active supervision and proper pool barriers were created. These spots will run on Turner Networks throughout the summer, such as CNN, Turner Sports, TNT, TBS and the Cartoon Network, reaching millions of families and pool owners.

3. Release of Our New Research Study

Safe Kids' new report, *Pool and Spa Drowning: A National Study of Drain Entrapment and Pool Safety Measures*, was released yesterday in our national news conference. (More information below.)

4. Distribution of Our Consumer Education Pieces

Through our coalitions, Safe Kids consumer educational materials on pool and spa safety will be disseminated in communities during Safe Kids Week and beyond. In addition, this information will be included on the Safe Kids website *www.usa.safekids.org*. Important safety messages to parents and caregivers are highlighted in both the print and online materials and include the following tips:

- *Warn your children* about the dangers of drain entanglement and entrapment, and teach them to stay away from the drain.
- *Install protection to prevent entrapment* if you own a pool or spa. Protective measures include anti-entrapment drain covers, multiple drains in new construction, and a device to automatically release the suction and shut down the pump should entrapment occur.
- *Actively supervise your children around water*, and have a phone nearby to call for help in an emergency.
- *Ensure your pool has fencing around all sides and a self-closing, self-latching gate*, to prevent a child from wandering into the pool area unsupervised. In addition, spas should be covered and locked when not in use.
- *Install a door alarm*, a window alarm or both on the side of the house facing the pool or spa to alert you if a child wanders into the pool or spa area unsupervised.
- *Tie up long hair securely* so that it will not get caught in a pool or spa drain.

Coalitions will also be distributing copies of our Water Watcher Card, which helps promote the concept of active supervision. Adults who are designated Water Watchers are responsible for actively supervising children in and around water during parties and other gatherings. The Water Watcher Card, worn around the adult's neck, also contains important information about what to do in case of an emergency. (For examples of our educational materials, see Attachment B: Pool and Hot Tub Safety Brochure and Attachment C: Water Watcher Card.)

Our Safe Kids educational materials will also be supplemented by a retail component sponsored by Johnson & Johnson. Due to their support, consumers will be targeted with pool and spa safety messages in the May 7th coupon insert in the Sunday newspaper and through in-store retail print materials from participating outlets. Consumers will also be able to pick up copies of the Water Watcher Card.

*B. Key Findings of Pool and Spa Drowning: A National Study of Drain Entrapment and Pool Safety Measures*

Key to our efforts is the release of our new research study, *Pool and Spa Drowning: A National Study of Drain Entrapment and Pool Safety Measures* (Attachment D). Our goal: to better understand why kids drown in pools and spas and what can be done to prevent these needless tragedies. Through our research, we discovered that:

- *Parents are not aware enough of the risk of their children drowning*. Only a third (34 percent) of parents recognized that drowning is one of the top two causes of accidental death among children. In the South and West, where the largest number of drowning deaths occur, only 39 percent and 35 percent of parents, respectively, were aware of this risk.

- *Parents are not aware enough of the risk of entrapment*. This finding is particularly alarming because research also reveals that pool and spa ownership is becoming more popular. A significant number of parents (29 percent) are not at all aware of the risk of entrapment. While one out of two parents report that they have a pool or spa at home (49 percent), 26 percent of these pool and spa-owning parents are not at all informed about ensuring the safety of their pool or spa drain.
- *Although devices are available to prevent drowning, entrapment and entanglement, pool and spa owning parents are not likely to have them installed*. Only 15 percent of pool and spa owning parents had anti-vortex drain covers and 12 percent had safety vacuum release systems in place. Only 28 percent had isolation fencing; 50 percent had perimeter fencing; and 34 percent had self-closing, self-latching gates.
- *While the majority of parents actively supervise their preschool children, parents tend to become less attentive as the children grow older*. While 93 percent of parents say it's necessary to stay in visual contact with a 2-year-old at all times, this figure drops to 80 percent of parents expressing this same necessity with a 6-year-old and then to only 42 percent with a 10-year-old.

Our research tells a grim story of parents' lack of understanding of the dangers of pool and spa drains. The research also suggests parents' confidence in their children's safety while swimming may be higher than their children's abilities in the swimming pool, leaving children exposed to unnecessary risks.

**VI. Conclusion**

Drowning is a complex issue with no single safety device or solution that works in all cases. Pool and spa safety requires a multifaceted strategy, including *active supervision by a designated adult, safe water environments and public education*, to ensure children's safety in and around water. Safe Kids commends this Subcommittee for convening this important consumer safety hearing and we look forward to working with you on any legislative initiatives and educational efforts designed to reduce the incidents of drowning.

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APPENDIX A—BACKGROUNDER ON POOL AND SPA SAFETY

**Drowning is the number two accidental injury-related killer of children ages 1 to 14, and the leading cause of accidental injury-related death among kids ages 1 to 4.**

- In 2003, 782 children ages 14 and under died as a result of accidental drowning. Children age 4 and under accounted for 62 percent of these deaths.
- In 2003, 285 children died as a result of drowning in a pool.
- In 2004, there were an estimated 3,702 near-drownings among children ages 14 and under.

**Pool and Spa Entrapment and Entanglement**

Entrapment occurs when part of a child's body becomes attached to a drain because of the powerful suction of a pool or spa's water circulation system. Death or serious injury can occur when the force of the suction overpowers the child's ability to disengage from the drain and rise to the surface of the water. Often, the strength of an adult is still not enough to remove a child trapped by a pool or spa's drainage system. Entrapment deaths can also occur when a child's hair or swimsuit gets tangled in the drain or on an underwater object, such as a ladder.

As pools and spas become more common among consumers, the potential risk of injuries and deaths from entrapment increases.

- The number of residential swimming pool owners increased by approximately 600,000 from 2002 to 2004, and the number of residential spa owners increased by about 800,000 over the same period.
- From 1985 to 2004, at least 33 children ages 14 and under died as a result of pool and spa entrapment.
  —Thirty-nine percent were hair-related entrapments.
  —Fifty-two percent of these incidents occurred in spas or hot tubs, 39 percent in swimming pools, and 9 percent in combination pool/spas.
- From 1985 to 2004, nearly 100 children ages 14 and under were injured as a result of pool and spa entrapment.

According to Safe Kids Worldwide, entrapments and entanglements are generally little-known risks for drowning. As a result, many drowning deaths may not have been classified as entrapment and entanglement, and the number of deaths is probably higher than reported.

**Drowning and Entrapment Prevention**

There are two primary ways to prevent pool and spa drownings and entrapments: safety devices to guard the pool and prevent entrapment, and active supervision.

1) Use of environmental safety devices. These include pool, spa and door alarms; four-sided fencing; self-latching and self-closing gates; proper drains; and safety vacuum release systems (SVRS). SVRS detect any blockage of a drain, automatically and immediately shutting off the suction to prevent entrapment. To ensure a safe environment, it is also important for pool and spa owners to install multiple drains, not just one, in order to decrease the amount of suction at the drain site.

Many pool owners do not take the proper environmental precautions to prevent accidental drowning.

- Installation and proper use of four-sided isolation fencing could prevent 50 to 90 percent of childhood residential swimming pool drownings and near-drownings.
- In 2005, 50 percent of pool/spa owners said they had perimeter fencing (fence encloses pool/spa and property), but only 28 percent reported having isolation fencing (fence encloses pool/spa only).
- Thirty-four percent of pool/spa owners have self-latching and self-closing gates.
- Only 21 percent of pool/spa owners reported having door or window alarms, and even fewer (7 percent) said they had pool or spa alarms.
- Only 15 percent of pool/spa owners have anti-vortex drain covers and 12 percent have SVRS.

2) In addition to environmental precautions, parents and caregivers must actively supervise children whenever water is present. Unfortunately, many parents do not realize the importance of active supervision around water at all times. Active supervision means that a parent or caregiver is giving undivided attention to the child and is close enough to help the child in case of emergency.

- Many parents (55 percent) believe that supervision is sometimes not necessary when children are swimming.
- As children get older, parental supervision becomes more lax. While 93 percent of parents believe it's necessary to stay in visual range of a 2-year-old child at all times, this necessity quickly falls off. By the time children are age 6, only 80 percent of parents say it is necessary to stay in visual range at all times. By age 10, fewer than half (42 percent) say the same.
- Forty-five percent of parents overall said they talk to someone else while supervising their swimming child, and 26 percent reported reading a magazine or book while watching their child.
- Nearly nine out of 10 drowning-related deaths happen while the child is under some form of supervision.

**Pool and Spa Drowning**

According to a 17-state review of childhood drowning deaths in 2000–2001, most young children (68 percent) were not intended to be in the water at the time they drowned. However, more children ages 14 and under die from drowning while swimming in a pool than die from falling into a pool.

- In 2003, 234 children ages 14 and under died as a result of accidental drowning while in a swimming pool.
- Fifty-one children ages 14 and under died in 2003 as a result of accidental drowning following a fall into a swimming pool.
- Younger children are more likely to be injured or killed as a result of accidental drowning in pools or spas than older children.
- More than seventy percent of pool drownings or near-drownings occur among children ages 4 and under.
- Nearly forty percent of drownings among children ages 4 and under are pool-related.
- Since 1980, more than 230 children ages 4 and under have drowned in spas.

# Swimming Safety

- [x] I always watch swimming kids, giving them my undivided attention. I don't read, eat or talk on the phone while I'm watching my kids. If I need to leave the pool area, I make sure there is another adult to take my place.

Designate an adult "water watcher" whenever children are swimming.

- [ ] I teach kids never to swim alone.
- [ ] I have been trained in CPR for infants and kids.
- [ ] I know the safe way to help someone in trouble in the water. I yell for someone to call 9-1-1 and throw the person something that floats or extend a long object to them.
- [ ] I stay within arm's reach of my kids if they can't swim. I don't rely on "water wings" or other inflatable toys.
- [ ] I make sure kids take swimming lessons when they're ready, usually after age 4. I make sure they learn how to tread water, float and get out of the water.
- [ ] I don't let kids dive into water less than nine feet deep.

# Pool and Hot Tub Barrier Protection

- [x] I never leave open a gate to the pool.
- [ ] I empty and turn over wading pools as soon as the kids are out.

**If I own a pool or hot tub (even a large inflatable pool)**

- [ ] I have a fence at least 5 feet high that separates the pool from the house and yard. It has gates that close and latch automatically. (For large inflatable or above-ground pools, a mesh or removable fence may be an option — check state or local requirements.)

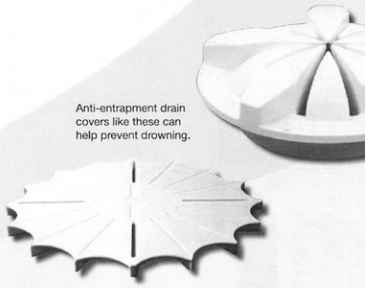
Use self-closing, self-latching gates around every pool or hot tub.

- [ ] If I have a free-standing hot tub, I cover and lock it when it's not in use.
- [ ] I have alarms on every door and window that leads to the pool or hot tub area.
- [ ] I keep rescue equipment by the pool or hot tub, including a shepherd's hook, life ring and a telephone.

# Entrapment Prevention

Entrapment occurs when part of a child's body becomes attached to a drain because of the powerful suction of the water filtration system or because the child's hair gets entangled in the drain.

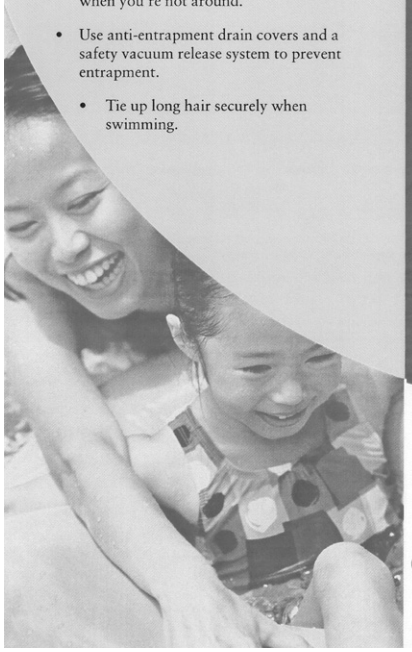
- [x] If I see a drain cover that is loose, broken or missing, I do not enter the pool or hot tub and notify the owner or operator.
- [ ] I don't let kids play near pool or hot tub drains.
- [ ] I tie up my child's hair securely if it is long.
- [ ] If I own a pool or hot tub, I have anti-entrapment drain covers and a safety vacuum release system — an emergency sensor that shuts off the suction automatically if the drain is blocked.
- [ ] If I'm building a new pool or hot tub, I install at least two drains.



Anti-entrapment drain covers like these can help prevent drowning.

## Remember:

- Always watch kids in and around water.
- Teach kids how to swim, and teach them water safety rules too.
- Use fences and other barriers to keep kids away from pools and hot tubs when you're not around.
- Use anti-entrapment drain covers and a safety vacuum release system to prevent entrapment.
- Tie up long hair securely when swimming.



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# Pool and Hot Tub Safety

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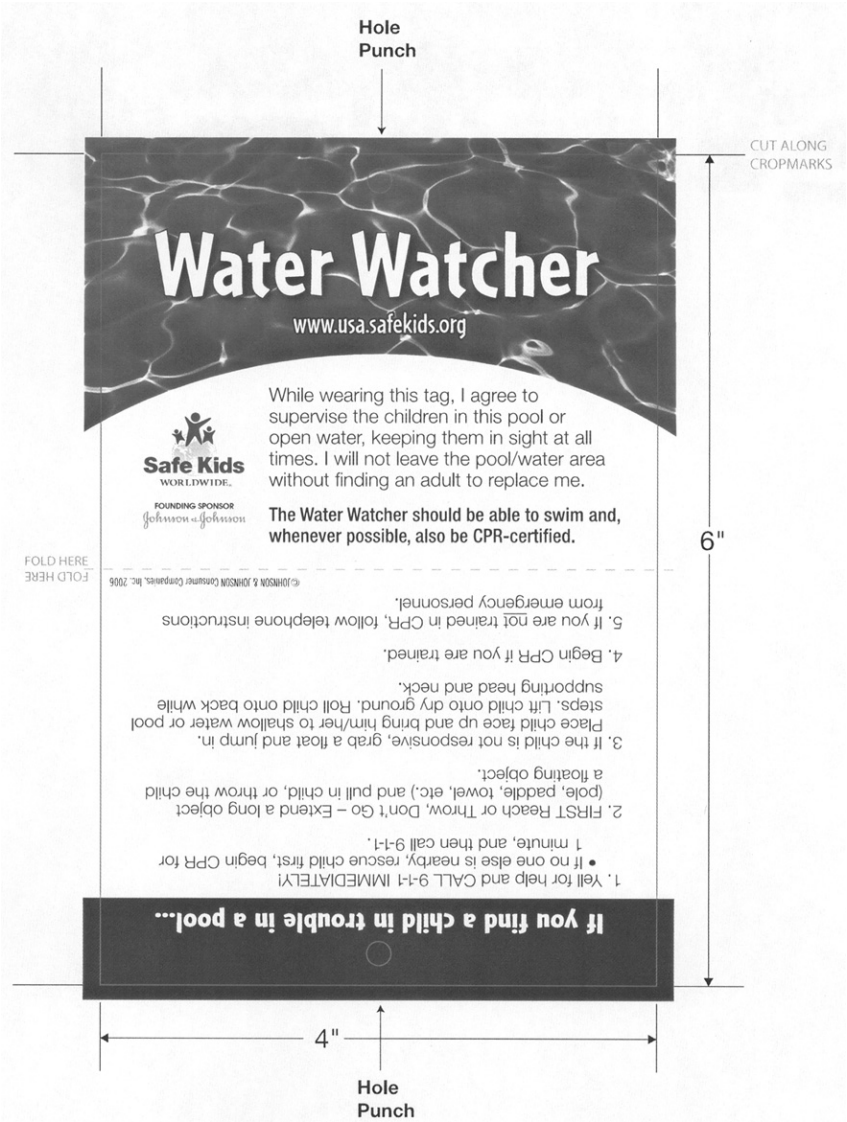


Senator ALLEN. Thank you, Mr. Korn, Mr. Laven, Ms. Baker, for your testimony. Let me ask a few questions here, one, how many of these nine deaths that have occurred so far this year, how many of them were entrapment versus drowning?

Mr. KORN. These were——

Senator ALLEN. Do you know?

Mr. KORN. Yes. Senator, these were all the common, as I—the common form of drowning. A child getting unfettered access to a pool. In most cases, it's a missing child and there's a panic, there's a search of the neighborhood, and then later, they search the pool

to find either the twins at the bottom or the other boys and girls that have been found. One of the things we like to say whenever there's a missing child, the first place to check: the trunk of the car and the pool before you start searching the neighborhood. So, those—your comment is a good one. There have been no entrapments yet, this year.

Senator ALLEN. Is——

Mr. KORN. That we know of.

Senator ALLEN. Is—all right. Well, those where they've drowned in the pool because they couldn't swim—deep end, whatever it may have been. Is there a difference in the suction pressure of a spa? I look at them as whirlpools, you know hot tubs. Is there a difference in the suction in those versus let's say, a single drain concrete pool? Mr. Laven, you'd probably know better than any.

Mr. LAVEN. I think the distinction, Senator, between a pool and a spa is generally the depth at which the main drain is located. A typical hopper bottom pool would have eight feet of water. People aren't prone to sit at the bottom of an eight-foot deep pool. They are prone to sit in a spa with shallow water. And that's why we're advocating the use of dual drains and a variety of methods to prevent suction entrapment.

Senator ALLEN. Dual drains in these hot tubs, spas as well, but not necessarily in swimming pools.

Mr. LAVEN. We recommend they're used in swimming pools as well.

Senator ALLEN. All right. How much do these—what's the cost of a new drain cover?

Mr. KORN. We've seen them in retail anywhere from $30 to $60, this one right here.

Senator ALLEN. All right. And Mr. Laven, could those be fairly easily substituted into any pool drain?

Mr. LAVEN. I welcome the opportunity to talk about SVRS. And in fact, I'd like to clarify the industry position with——

Senator ALLEN. OK.

Mr. LAVEN.—regard to them. I think——

Senator ALLEN. Well, I was asking about these drain covers, but you can get into the SRVSs too.

Mr. LAVEN. We don't oppose their use. In fact, we support anti-vortex drain covers and similar drain covers to this, that Mr. Korn has provided today. They prevent some, but not all forms of entrapment. We have no concerns whatsoever about the cost. Cost is not an issue from the perspective of the industry. There exists a number of effective methods to prevent entrapment and what we support is a standard that requires one or more means of protection against all forms of entrapment. We don't want to specify which one, as innovation will likely develop an even better method tomorrow.

Part of our concern about the bill that is being proposed in the House, is that it specifies one and only one method, and it requires a certain product to be used. And we think that the direction of the bill is meritorious. We support the objective of preventing entrapment and drowning, but we believe that adoption of the industry standards within all 50 states, is a much better method than what is being proposed in this one piece of legislation.

Ms. BAKER. Mr. Chairman?

Senator ALLEN. Yes, Ms. Baker?

Ms. BAKER. May I speak real quickly?

Senator ALLEN. Sure. Of course.

Ms. BAKER. I just wanted to say——

Senator ALLEN. Why don't you move your microphone.

Ms. BAKER. Is it better like that?

Senator ALLEN. That's better. Yes.

Ms. BAKER. I have some concern about—I've read many things about reluctance to adopt standards that would be in place today, because of what might develop tomorrow, that might be a better means of addressing some of these hazards. However, everything else I've also read, and googled, and I spent a lot of time doing all of that, is that those devices over there are the only ones currently available that are tested that would prevent entrapment and that's all varieties. Those drain covers are meant to prevent hair entrapment and make it less likely for a child's body part or an adult's to be able to seal the cover.

The SVRS device I believe, is the only device around that would detect a change in the pressure in the lines, which is what happens of course when suddenly the pipes are drawing air instead of water, because they're sealed. Do you understand that? I believe that's the only device out there that does—that would shut the pump down. Because you see, when my daughter was entrapped, I didn't know what was holding her down. I thought she was being murdered. I thought that she was wired to the bottom. I'd never heard of such a thing. So, I wouldn't go running around looking around the yard for what to—you know what to cut off, as my friend, Mr. Amjad Ghori, who lost his child 6 months later. That hotel didn't figure out that it was the pump holding her down. They just—when all this was going on, they shut the electricity off because they didn't know any other way to free her.

So, that's why I support this legislation. Because I don't know if there are any other answers out there. Why would you not fix a problem today with the tools that you have available, than to wait until tomorrow when something better comes along? I assume you'd just do what you can do now to save lives and make adjustments later when greater innovations come along, to my way of thinking.

Senator ALLEN. As I understand it, there's not just one company that makes these SVRS's, is that correct, Mr. Laven?

Ms. BAKER. I think there are lots of them, there would probably be more if they——

Mr. LAVEN. I believe there are two, and there may be more.

Senator ALLEN. Two companies that manufacture them?

Mr. LAVEN. SVRS, that's correct. But——

Senator ALLEN. And in the event, that if you had a standard and it's—Ms. Baker and Mr. Korn may be more familiar with it, there are a lot of times we set standards and do not make them technologically specific. It's not necessarily and obviously in this subject area, but others. You find it particularly in the area of innovation. That you don't want to say, gosh, this is the only way, for example, that one will get broadband is by cable modem. You can get a DSL, you can it wirelessly, you can get it off power lines. There's a lot

of different ways. So, you don't like to make things, because you don't want to stifle innovation or creativity.

Now,are there—these are two examples and I'm sure there are other types of covers—drain covers. There are at least two, it's been stipulated, companies that manufacture these cutoff valves. If you do have two drains, supposedly then there's less suction since they're drawing from two. Those are just three right there, different sort of approaches that one would take. I would think a fourth one would be the reality that in a swimming pool that is a concrete pool or as opposed to a vinyl liner pool, and vinyl pools as I understand it, have no bottom drain in them. I suppose they could.

But isn't also true, that if you use the cleaning—for the cleaning of it, you can use it off of your skimmers. Most pools have at least two skimmers on them and you do have that tube that goes through it. And I suppose, somebody could get all tangled up in the tube, as well. Life has its risks in living, which is part of the adventure of life.

However, if there are reasonable approaches that can be taken to protect lives, whether it's these covers or in the future, say future pools as opposed to retrofitting, new pools being made have these—something like a suction relief approach or SVRS's as we call them. What would be wrong with that? Or also, allowing any other methods, Mr. Laven, in the standards that would—In other words, you can say those for examples and they're not exclusive, but they're included as well as any other approaches which would meet that same sort of goal, as shutting off suction if there's that interruption of a human being.

Mr. LAVEN. The ANSI standards adopted by the Pool and Spa Industry Association provide for a variety of methods that are equally effective to the SVRS device. And that includes: dual drains, anti-vortex covers——

Senator ALLEN. That's what that would be considered—an anti-vortex cover, right?

Mr. LAVEN. Yes. That is one.

Senator ALLEN. Just for the record.

Mr. LAVEN. That's one design of an anti-vortex cover. Air relief plumbing is another alternative.

Senator ALLEN. What is air relief plumbing?

Mr. LAVEN. Air relief plumbing is where a section of PVC pipe is attached to the drain line and it would provide that when the cover—and it goes to daylight, it's out in the—above ground level. So that when entrapment occurs on the drain, air is drawn into the line and it stalls the prime of the pump. And therefore, it is an effective method and a cost-effective method as well, avoiding entrapment and providing a release.

Pool covers, automatic pool covers are also effective methods to provide for avoidance of drowning in residential swimming pools. And as we said, we want to allow for the possibility of other designs to enter the market at some point down the road. But my point here, is that there are currently available designs, in addition to the ones that are stipulated in that legislation.

Senator ALLEN. All right. Now, would there be a way of drafting legislation? This is the value and purpose of hearings, is to learn.

So that in the event that the government acts, it acts in the right way and doesn't end up stifling innovation or having certain winners or losers in the midst of an effort to save folks. And I do like, if anything's going to be done, just personally, I'm speaking for no one other than myself, incentives. The .08 laws, the mandatory seat belt laws, and all that—I do not consider those incentives. I look at those as blackmail of the states. I'm for .08 blood alcohol level. We passed it when I was Governor. We don't need the Federal Government dictating that to the states, as far as I'm concerned. You and I would probably disagree, Mr. Korn. But, I just don't like nanny Federal Government bothering in those areas and I think there are more important things for law enforcement to worry about than our laps driving down the road. Although, there is a difference for children and that's probably one of the things that is most compelling here, and that is children. And if anything is going to be done, it ought to be an incentive as opposed to withholding of highway funds in the usual sort of blackmail you get out of the Federal Government over the years on a variety of approaches. And I'm not going to be a part of blackmail. I want to be for incentives.

Now, if we're going to have incentives, let's make sure this makes sense. Wouldn't Mr. Laven's statements, as far as if we're going to pass legislation with incentives for the states to do—by the way, what they ought to be doing anyway whether you're in Florida, whether you're in California, Texas, Arizona, Virginia, or Maine, you ought to be doing what is right.

And I would think that insurance companies are going to care about this. I would think that those who are in your industry, not wanting to get sued by not putting in the most—and whoever works on a pool—by not putting in the most safe products or designs. Especially for henceforth or new pools. Would you not think that, Mr. Korn, if we could somehow get you two together and figure out a way—I don't know. Maybe there is no way of getting you all together and agreeing, but I think that you both share—all of us, every—all the witnesses and probably everyone in this room and I know Senator Pryor and I agree that we ought to try to find ways to improve pool safety. It will not make it absolutely safe.

Being in water is inherently an adventure, just like riding a horse is an adventure. And people get injured riding horses, they get injured swimming, diving, and all the rest. I don't care to prevent it.

But is there a way to meet what Mr. Laven is saying? And that is, have a goal, but not proscribing the specifics. You may include them, but not create liability and more importantly, to the extent there are more—there are additional approaches in the future, that they would be included in those standards adopted by the states.

Mr. KORN. Senator, what you are referring to is what's referred to as a performance standard.

Senator ALLEN. Uh-huh (affirmative).

Mr. KORN. Where you have a goal of preventing entrapment, having pumps shut off immediately. You describe those goals and you allow the industry moving forward to meet that goal. Right now, we've got several products that meet it. But in the future, there could be something better. So, you work toward that perform-

ance-based standard and that's a possibility to look for. It's something that the CPSC can do and they do regularly.

Senator ALLEN. So, it sounds to me, that you're in somewhat of agreement, if not in agreement with what Mr. Laven's concerns were with at least, in how this legislation is being crafted on the House side.

Mr. KORN. I draw the analogy to the requirement for seat belts. It didn't prevent us to do it and air bags came later. Today in the marketplace, we have things that work: layers of protection. Let's utilize those layers of protection to save lives, and keep us flexible, and open as industry creatively thinks of new engineering and behavioral advice to prevent children from dying. So, that's how we kind of think about it. And we think the bill does get to that point.

Ms. BAKER. Chairman Allen, I'd also heard of a pool—I heard someone from the industry speak at a Drowning Prevention Symposium, who said, what about a pool with no drain? You know, there was a pool designed with no drain at all. Superb.

Senator ALLEN. Right.

Ms. BAKER. I don't know that those pools are built.

Senator ALLEN. They are.

Ms. BAKER. I haven't seen them. Too often——

Senator ALLEN. They are.

Ms. BAKER. But again, does that avoid the entrapment issue? Yes. No drain. No entrapment.

Senator ALLEN. Ms. Baker, I've talked to some folks who actually—of course they have the vinyl liner pools and they—if anybody wants a bottom drain on it, they simply aren't going to put them in. The cleaning, they believe can be done—Mr. Laven, can you give me the terminology for the suction?

Mr. LAVEN. There are wall drains as well as bottom drains, and there are pool cleaners that I think we were referring to before. But, the point of fact is——

Senator ALLEN. They go off the skimmer or off the side, as opposed to——

Mr. LAVEN. Yes. Cleaning devices that operate from the skimmer, by attachment to the skimmer.

Senator ALLEN. Right. And no one's been sucked into a skimmer.

Mr. LAVEN. That's correct.

Senator ALLEN. Plenty of frogs and such, but not humans.

Mr. LAVEN. The industry shares the goal of avoidance of drowning and we will work hard with both Ms. Baker, and Mr. Korn, and his agency to further that goal.

Senator ALLEN. Do you know of the folks who are in your—the contractors who would prefer to have construct pools that don't have a bottom drain? Isn't that the case with most of the vinyl liner pools, as opposed to a concrete?

Mr. LAVEN. I actually believe that the majority of vinyl liner pools being constructed today, do contain dual main drains. However, I'm aware in many locales, that pools are being built without any main drains and that is perfectly acceptable within the framework of the current standard that was ANSI-approved.

Senator ALLEN. Senator Pryor, do you have any questions?

Senator PRYOR. I do. I just have a few. Thank you, Mr. Chairman. Mr. Korn, let me ask you, I guess it's kind of a legal question

and that is, do you think that the CPSC has the jurisdiction to mandate the safety devices on pools and spas without any more State or Federal law?

Mr. KORN. I do. The CPSC reauthorization statute defines consumer product, which is the jurisdiction of the CPSC, very broadly. It's basically, any product used in homes, schools, for personal use, or for entertainment. I think a swimming pool can be considered a product by that definition. That definition, I believe, can if the Committee wants to explore that route, give the CPSC jurisdiction to mandate or child-proof pools the same way you might child-proof a cigarette lighter, which now has to have child proofing on it. Or a medicine bottle, which is—the CPSC has jurisdiction over those. So, I do believe that's the case. It's a very broad authorizing statute. And I think swimming pools would fall under that definition.

Senator PRYOR. All right. Let me just ask, just out of pure curiosity, as far as I know, Johnson & Johnson is not in the pool and spa business at all, but they're supporting this. Is there something I need to know about?

Mr. KORN. Yes. They do do Band-Aids. That doesn't help in this situation, Senator. We've been working with Johnson & Johnson for 19 years and I've been working with them for 12 years. And quite simply, I'll just be frank. It's a company that cares about protecting kids and they have been funding us and lending us their expertise for years to help us prevent kids from getting injured, finding their ways to emergency rooms, or worse yet, coffins. And they were motivated, like us, by the Baker story, and pool drowning in general. And we get their help to move forward with this and we sure are appreciative of it.

All that you've seen in the past few days, is in part, related to their support for what we're doing.

Senator PRYOR. I just didn't know if they had a connection, other than just——

Mr. KORN. Yes.

Senator PRYOR.—wanting to do it, because it's good public policy. Mr. Laven, if I may, I asked a few moments ago about the CPSC jurisdiction, do they have the authority right now to put in some of these requirements? Do you have an opinion on that?

Mr. LAVEN. Oh, the industry trade association has worked with the CPSC through the last several decades and we would continue to support their promotion of the awareness and education of these issues, and we would look forward to working with them on any recommendations that they want to put forth. Our goal is to prevent drowning in backyard swimming pools, simply stated. And any attention that we can bring to the subject is welcome.

Senator PRYOR. So, do you think they have the authority right now to put requirements out there on swimming pools?

Mr. LAVEN. I don't know the answer to that question, sir.

Senator PRYOR. OK. That's fair enough. Well, tell me, if you can, the difference in the CPSC guidelines and the American National Standards Institute's standards. Can you give us a very brief rundown on that?

Mr. LAVEN. I can speak to the American National Standards——

Senator PRYOR. OK.

Mr. LAVEN.—process. They review—there's a drafting committee that is developed of members of our trade association and comments are then submitted to a wide variety of reviewing agencies and individuals who are referred to as a canvass list. And that includes: representatives of CPSC, American Red Cross, CDC, National Sanitation Foundation, UL, Public Health Officials, universities, and other interested parties. And they are all free to comment on any of these proposed standards. And ultimately, any comments that they make have to be re-circulated and those issues resolved, before a standard can be adopted utilizing the ANSI process.

As I said in my oral testimony, we have eight standards that have gone through that process—that rigorous process and have been adopted. And one is in a draft mode today.

Senator PRYOR. OK. Let me ask if I can, about SVRS. I assume, I mean I don't know if that's the entire SVRS apparatus there laying on the witness table, but I assume they can be retrofitted on the pools, is that a problem?

Mr. KORN. Yes. To my understanding, it can. Yes. But—now, I know it can.

Senator ALLEN. Mr. Laven, is that right?

Mr. LAVEN. I believe that's correct.

Senator PRYOR. You can just retrofit them on there? Just whatever existing pump machine or either somehow to attach them to an existing pump? Do you have a sense, Mr. Laven, about how expensive it is—parts and labor, to retrofit a swimming pool with one of those?

Mr. LAVEN. I don't. But again, this is not an issue of cost. From the perspective of the industry, we are fully supportive of measures to prevent drowning and entrapment. And we believe that the methods that are currently embodied in our standard today, do so. And the use of a mandated device, such as this one, is not the only method to prevent entrapment.

Senator PRYOR. Mr. Korn, do you have a sense of how expensive it is to retrofit a pool?

Mr. KORN. I think some of the manufacturers in the room, they tell us it's about $725. You can find that at the retail level.

Senator ALLEN. Is that parts and labor?

Mr. KORN. I believe so, yes.

Senator PRYOR. The reason I ask about cost, I know when you look at it as an industry that's a very small cost, very small price to pay for the overall safety that you're getting in return. But it is a real cost for the homeowner, and I'm just trying to get a sense of how expensive something like that would be.

Also let me ask you, Mr. Laven, if I can, I have your little booklet here, a little brochure entitled, "Layers of Protection," and you have a diagram in there where you list out—looks like about 14 different layers of protection. And I mean, these range from anything from having an outside telephone, to having an automatic cover that goes over the pool. Is it your testimony that this brochure is the ideal that a homeowner's pool should have all these layers, or should they pick and choose and have some? Tell me the industry position on that.

Mr. LAVEN. Well, Senator, it's our position that one size does not fit all. There are a variety of methods that are effective in preventing drowning and/or entrapment. And the objective of this piece of literature is to demonstrate to consumers a variety of these techniques and to work with them based on their needs, the age of their family, if they have young children or they do not, what kind of installation they want, and which of these available methods they choose to utilize.

A swimming pool is not a prepackaged product. It's not as if manufacturers can require and attach all of these products to them at the factory. The reality is, they are built onsite and in fact, each in-ground swimming pool is unique and different. And what we're recommending is a variety of these methods be analyzed and discussed with each homeowner to meet their needs.

Senator PRYOR. And in fact, in this, I'm not sure I see the SVRS. It may be buried in here somewhere in the text, but it's not jumping out at me. But let me ask this from the industry standpoint, here again in this, I know it's a brochure and it's really to give some general advice to the pool owner. There are 14 different things listed in here, plus I think—well, I would say we should add the SVRS on there, so, let's say there are 15 options that people have. Does the industry have a recommendation on going with 4 out of the 15 or 8 out of the 15? Is there a generally acceptable standard within the industry of what you should be selling to homeowners as they put in swimming pools?

Mr. LAVEN. The industry urges the adoption of its ANSI-approved standard in all 50 states. The fact remains today, that states have the choice to accept the standard, or not accept it, as do local localities, that we can help avoid many of these tragic events if more states adopted them and more localities adopted our standards. Many of these events are occurring in places where there is no adoption of the APSP standard today.

Senator PRYOR. All right. Let me ask this, we've seen some covers here on the witness table and as I understand it, some of these flat drain, these more traditional style drain covers, are still being manufactured and sold in the U.S., is that right?

Mr. LAVEN. I'm not familiar with any flat drain covers being sold today. Everything that I have seen in our trade shows, and that is being used on swimming pools that I visit each day, are anti-vortex, main drain, domed covers, covers that prevent entrapment completely.

Senator PRYOR. Well, that's what I like to hear, because that sounds like the marketplace is trying to address something in a very common sense way. And also—and this will be my last question, Mr. Chairman, is the Pool and Spa Safety Act—you mentioned that one of the problems you had with it was the fact that it might prefer one product or one technology over other options that may not even exist today, that may come in the future, and I certainly respect that. But, what other problems do you have with that act? Is that the only problem that you feel like it sets up a preference for a few existing technologies, or do you have other problems with it?

Mr. LAVEN. No. My primary concern about SVRS is that I personally am aware of one company who has a patent, and is pro-

moting their methodology, and who is supporting this particular piece of legislation. And as an industry trade association, the brochures and the things that we do, don't select one manufacturer at the expense of others. We recommend a variety of methods be used, provided that they accomplish the objective of ensuring avoidance of entrapment.

Senator PRYOR. Mr. Chairman, I think that's all I have.

Senator ALLEN. Thank you. As we move forward here, do you—if any of you all, and probably Mr. Laven and Mr. Korn would know the most, but it would seem to me that if people have a swimming pool at their house, insurance companies and potentially the lenders, but more and more likely, insurance companies are going to require certain safety matters.

I wanted to get my kids a trampoline and then found that insurance companies said, well, we're just not going to cover it. And you know, kids get injured on trampolines. They are great fun, but kids and neighbors come in, and they're all bouncing around, and one could bounce off and be injured, you get sued. So, we couldn't get a trampoline.

Even in a dryer, the insurance company said well, if you're going to insure this dryer, you have to get a metal exhaust hose, so that it stays in place, as opposed to one that is plastic, breaks and then you get the exhaust, so to speak, out of the dryer. And so, a lot of the times insurance companies are requiring this.

Do you know of insurance companies' reactions, or policy—what they require of policyholders that have swimming pools in their backyards? Mr. Laven or Mr. Korn, and whether or not for example, if they're going to be worrying about someone's dryer, or do they worry about, or do they inspect to see if there are those drain covers that are vortex, so that hair and humans can't be sucked into it? Do you know of any of that?

Mr. KORN. My guess, Senator, and it's just that, is no. We even see a disconnect between what are commonly accepted safety devices or the drain covers, and as you get down to the pool service side, just the awareness is not there yet. So, I don't know for sure. My guess is no, but we do have a lot more education to do and the insurance companies would be one of the people we want to communicate with.

Ms. BAKER. Mr. Chairman?

Senator ALLEN. Yes?

Ms. BAKER. Since I'm from Virginia and at my old home we had a pool, the insurance requirement was for three-sided fencing——

Senator ALLEN. Uh-huh (affirmative).

Ms. BAKER.—to prevent anything from the outside—a bird coming in, but the pool in this older home that we had bought, had originally flat drains and there was never any—I didn't know anything about entrapment but there were no requirements around the drains, or how it was plumbed, or—there was none of that.

Senator ALLEN. Mr. Laven, what do you know about what insurance companies——

Mr. LAVEN. I am not aware personally, of any insurance companies being vocal on the topic of SVRS, or drain covers, or things along the lines of entrapment. As tragic as the Baker family loss is, it is the most infrequent of the types of safety issues that our

industry faces everyday. We find far more drownings, as Mr. Korn has pointed out, than entrapments. And we are also faced with diving injuries.

I am aware of some insurance companies and some markets, being vocal on the issue of diving boards. But that's the only item that I am familiar with, sir.

Senator ALLEN. All right. This is the reason for a hearing, to learn from all of you, as well as our first panelist, as to what would be appropriate. I look at the Pool and Spa Entrapment Hazards Checklist from the Consumer Product Safety Commission, and it's called entrapment, but it may be the checklist and it's just because we're not as conversant with it. But if you look at this, it just says, proper suction drain covers installed if applicable, SVRS or other device tested in operational according to the manufacturers instructions.

It strikes me as what they have is pretty broad. It may not even be specific enough, but it is fairly broad in that there is a checklist as far as the Pool and Spa Entrapment Hazards Checklist. And this is to be checked: the filter room in pool before filling and after periodic maintenance and cleaning procedures.

Mr. Korn, have you looked at these guidelines? This is from March of last year.

Mr. KORN. Yes. And I think some of the other consumer education pieces produced and published by the CPSC talk about these layers of protection. All four of them matter of factly: four sided fencing, isolation fencing, other things that you mentioned, pool alarms and so forth. The SVRS systems, the anti-entrapment drain covers, and the dual drains. So, the checklist is fairly consistent with what they're doing from a community education basis. By the way, we think we could do a lot more on this issue, but the items are contained in there.

Senator ALLEN. Mr. Laven, in the event that we act, if we're going to act, from—and I'm speaking for myself, I think that it should be one that is—we're concerned about entrapment from a variety of different ways. And there are a variety of different ways that this suction cutoff can be handled. I would think that retrofitting is easier than digging in another hole or another pipe. Although that may work, particularly for new construction. And there may be others, who knows what will come up in the future? So, let's assume that we're going to move one way or the other, and we're going to consider this, because I know that Senator Pryor and I always want to think of every angle and what's the best approach? And we don't like to stifle innovation. But we don't want to have people not enjoying pools or making them so costly that fewer people can enjoy pools or spas. But in the event that we adopted an incentive program to the states which have these broad approaches, would your association be favorably inclined for such legislation, a broader approach with goals, as opposed to what is going to be introduced in the House which is too narrow and impedes innovation, in your perspective? And in fact, Mr. Korn was talking about this. Could you be supportive of that sort of an approach?

Mr. LAVEN. The Association of Pool and Spa Professionals would welcome the opportunity to work on that piece of legislation, to

make changes, to make improvements, and to bring more attention to this issue. Yes, Senator. We would definitely appreciate the opportunity to be heard on the topic and to make improvements in that particular piece of legislation, and to provide incentives for the states as that contemplates, for adopting pool and safety measures.

Ideally, our solution would be the adoption of the ANSI-approved standards that we have, which we believe encompass all of the items that are in that current bill.

Senator ALLEN. The bottom line, I don't want to put words in your mouth, because it's important what you answer here, because you're representing a large association, a diverse association across this country. The point is, is that this sort of broader concept incentive approach, if properly crafted, could ultimately have your support. And of course we're going to have you involved, and Ms. Baker, and Mr. Korn, and many, many others including the Consumer Product Safety Commission, in crafting any sort of legislation. The point is, this concept as I outlined it, ultimately could have your support.

Mr. LAVEN. Absolutely, Senator.

Senator ALLEN. Thank you. That's good. Let me just say one thing and this is off the subject, Mr. Korn. I—and since you care about kids, and some kids are still in their mother's womb, I understand that these hot tubs are not desirable for pregnant women. Would you like to make any comment on that from your knowledge?

Mr. KORN. I don't know myself, the medical benefits. I have spoken to a spa inspector who told me, for what it's worth, that a pregnant woman does not want to get into a hot tub. It's been a while since I've had to focus on that situation myself. I was——

Ms. BAKER. Chairman Allen?

Senator ALLEN. Yes?

Ms. BAKER. I once was pregnant——

Senator ALLEN. All right.

Ms. BAKER.—and my doctor said, the heat is not good and the chemicals in the water are probably also, not good. Don't quote me on it. Quote my doctor.

Senator ALLEN. Now we just have two television cameras here and this is recording us—along with a stenographer, court reporter. One of the values of this Committee I have found, is just simply educating people as to certain risks. And I think people, if they are educated as to the risks, will for the most part, show common sense notwithstanding what any level of government does. But that's one thing people would say, oh my goodness, what's the worry? But, there is a worry with it.

So, do you have any further questions?

Senator PRYOR. No, thank you.

Senator ALLEN. Well, if there are no further questions, I want to thank all of our witnesses, including Ms. Elder, for your testimony. I do think that we have—to the extent that we have reporters and others watching this hearing, in fact, just holding this hearing got a lot of media attention, which has gotten the attention of parents who think of their own children and what you went through, Ms. Baker. And I'll tell you, the heartbreaking, heart wrenching story, which took a lot of bravery on your part to recount this time after

time, is making sure that they'll not be other children, they may not be named Graeme, but other children that will not lose their lives in such a horrendous, frightening approach obviously for the child and for their parents.

I think we've also heard a reasoned analysis here, and there seems like there is an area of consensus where we can come together and craft if there's going to be legislation. And I suspect there may be. But, one that makes sense for those who are most knowledgeable in the industry, coming up with standards, which are not so restrictive that it thwarts creative ingenuity and innovations. And I think if we can get the three of you all together, and the CPSC, and Senator Pryor and I, we work in a nonpartisan, bipartisan basis. I look forward to doing so. And I thank you all. You've really brought to light a concern, but also shed light on where we need to go into the future.

I thank all of our panelists for your preparation, for your time, and we'll also continue to be working with you in the weeks and months ahead to craft appropriate effective legislation to prevent and avert future deaths or injuries in these spas or pools.

Thank you all and the hearing is adjourned.

[Whereupon, at 4:40 p.m., the hearing was adjourned.]

# A P P E N D I X

U.S. CONSUMER PRODUCT SAFETY COMMISSION
*Bethesda, MD, May 5, 2006*

Hon. GEORGE ALLEN,
Chairman,

Hon. MARK PRYOR,
Ranking Member,

Senate Subcommittee on Consumer Affairs, Product Safety, and Insurance,
Commerce, Science, and Transportation Committee,
Washington, DC.

RE: POOL SAFETY

Dear Senators:

Thank you for inviting a representative from the U.S. Consumer Product Safety Commission (CPSC or Commission) to testify before the Subcommittee on Consumer Affairs, Product Safety, and Insurance at the May 3, 2006 hearing on Pool Safety. As you know, drowning hazards have been an issue of concern to the Commission for decades, and your hearing was an important step forward in further alerting the public to the serious risks associated with children and pools. This letter is intended to supplement the testimony of the CPSC at the hearing.

As you know, the Commission has been active in identifying and publicizing the risks related to pool drowning and drain entrapment and has issued detailed safety information and guidelines on how to reasonably mitigate these hazards. (These guidelines were submitted to the Committee for the hearing record.) The purpose of the guidelines is to provide information, awareness, and recommendations on pool safety for consumers and others to attain "layers of protection" against entrapment and other pool hazards.

Pool construction is subject to a wide variety of state and local regulatory authorities. The scope and detail of such regulation varies widely not only from state to state but often within each local subdivision in a state. Many pool construction requirements, including safety features, are adopted in local building codes and include requirements for and inspections of pump and filter systems, skimmers, drain covers, and perimeter security. The Commission's guidelines related to pool barrier safety and entrapment consider these competing jurisdictional issues.

At the hearing on this matter, an inquiry was made as to whether the provisions of the Commission's guidelines can be made mandatory by the Commission. It is unclear whether all of the recommendations may be made the subject of mandatory regulations promulgated by the Commission. As discussed, the subject matter of some of the guidelines, such as those that relate to construction issues, are covered by state and local jurisdictions. Because of the multiple jurisdictions involved in this area, the Commission has historically issued and recommended guidelines dealing with this subject matter so those entities that have jurisdiction in each area may act accordingly toward the goal of saving lives and preventing injuries.

The Commission remains committed to continuing its aggressive pool safety activities by performing research, conducting public education and awareness campaigns, investigating new technologies, promulgating safety regulations where appropriate, and working with all stakeholders to save lives and prevent injuries.

JACK HORNER,
*Director, Congressional Relations*

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PREPARED STATEMENT OF MAUREEN WILLIAMS, PRESIDENT, NATIONAL DROWNING PREVENTION ALLIANCE (NDPA)

**Toddler Drowning in the U.S.—A Preventable Tragedy**

Tragically, drowning is the number two cause of accidental death in children under age 5 in the United States. Many years, it's the number one cause of accidental death of toddlers in the Sunbelt states. In children ages 1 to 5, the majority of these drownings take place in residential swimming pools.

Yet, drowning is a totally preventable tragedy that takes a huge toll in lives lost and families destroyed. The loss of a child from any cause is difficult to endure, but in the drowning of a child, the guilt factor is often insurmountable. In a traffic collision, others may be perceived to be at fault. In a drowning incident, the caregiver who was supervising the child at the time of the incident must reconcile how a perfectly healthy, happy toddler who was in his room watching a video five minutes earlier is now dead. The divorce rate among parents of children who have drowned has been estimated to be as high at 98 percent.

The costs associated with toddler drownings, however, go far beyond the emotional toll. Many children who succumb to drowning have first spent days in the hospital on life support. Care for children who survive drowning incidents with significant brain damage, and who live into adulthood, must frequently be paid through Medicaid, either because the parties involved are uninsured, or the insurance cap has quickly been reached.

In an Australian study (J. Paediatric Child Health 2003), it was determined that neurological damage at discharge following near-drowning was reported in 7 percent of children under 5 years. In the U.S., the CPSC estimates that 2,600 children survive a drowning incident each year. If 7 percent of these children survive with neurological damage, that is 182 children per year that most likely will need some degree of care throughout their lives.

Nadina Riggsbee, a board member of the National Drowning Prevention Alliance, knows the costs firsthand. Her son JJ was revived after a drowning incident over a quarter of a century ago in which his sister lost her life. For many years, JJ Riggsbee has been unable to communicate in any manner and has required 24-hour-a-day nursing care.

Nadina has been a tireless crusader for drowning prevention since her children's 1979 tragedy. With the cooperation of the California Department of Developmental Services, she has calculated that there are presently over 600 drowning survivors in California State Hospitals and community care facilities including private homes. The cost of nursing care for the vast majority of these patients is paid by Medi-Cal, California's Medicaid program. For those being maintained with a level of care similar to JJ Riggsbee, the cost of nursing care averages $17,000 a month, which equates to $204,000 per year. Multiplied by 600 patients, this care is an astronomical $12,240,000 per year.

This figure does not include periodic visits to acute care facilities for the treatment of pneumonia, a common occurrence with those who've suffered this type of injury; durable medical equipment such as custom wheelchairs at up to $8,000 each (many of these patients "posture" due to the brain injury, and cannot use a regular wheelchair); respiratory care, physical therapy, medication, respiratory equipment, etc.

And these children are still entitled to an education, so states must fund special education instructors, specially equipped buses to transport them to school, nurses or aides to accompany them, and many other accommodations that must be made to ensure an equal opportunity.

The statistics above reflect just the yearly cost in California. Toddlers drown in every state in the union. It happens more often in Arizona, California, Florida, Nevada, Texas, and other states where the weather is warm year-round, but states like New York and Washington also have serious childhood drowning problems.

The reality is, drowning doesn't just happen, like childhood leukemia, it's a preventable injury.

The best prevention is "layers of protection" around every residential and community swimming pool, with the most effective layer being four-sided isolation fencing surrounding the pool.

Many drowning studies documenting the effectiveness of isolation fencing have come out of Australia, as it was one of the first countries in the world to have adopted stringent fencing legislation. Because of this, researchers have been able to docu-

ment a significant reduction in toddler drowning rates before and after this legislation was introduced.

U.S. studies include a report published by the Arizona Child Fatality Review Program, "Data on Child Drowning Deaths, on April 7, 2003 (see *www.childrensafetyzone.com*).

The team studied the drowning death reports of 269 Arizona children under 19 years of age that occurred from 1995–2001. The study says, "There were only six deaths that occurred in backyard pools in which it was known that there was an adequate pool fence that had a properly functioning locked gate. In at least two of these six, the child had access to the pool from a doggie door."

The study goes on to say, "The ACFRP determined that supervision of the child and pool fencing could have prevented 90 percent of the drowning deaths that occurred in backyard pools."

Adding other types of barriers, such as alarms and automatic pool covers, can provide additional layers of protection that can buy the caregiver the few minutes needed to re-establish eye-to-eye contact after a momentary distraction such as answering the door or phone, cooking dinner or even checking e-mail.

The National Drowning Prevention Alliance (NDPA) supports the passage of legislation to require layers of protection and entrapment prevention devices for every residential swimming pool in the country, whether a permanent pool structure, or a large inflatable pool.

The NDPA was formed in early 2004 to maximize efforts to prevent drowning through the development and implementation of strategies to facilitate and improve education, public awareness, effective barrier codes, and greater utilization of layers of protection.

This national organization is comprised of individuals, organizations, government agencies and corporations who have the common goal of saving lives. The NDPA board of directors includes four parents of children who have drowned along with representatives of numerous public agencies involved in drowning prevention. See *www.preventdrowning.info* for further information. Thank you for giving us the opportunity to submit this written testimony.

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PREPARED STATEMENT OF THE NATIONAL SWIMMING POOL FOUNDATION®

Thomas M. Lachocki, Ph.D. and CEO of the National Swimming Pool Foundation based in Colorado Springs, Colorado, is submitting the following testimony on the Pool and Spa Safety legislation submitted by Representative Debbie Wasserman Schultz of Florida.

It is important that Federal guidelines on pool safety be adopted because there is such a disparity on jurisdictions from state to state. Adoption of these guidelines will help provide uniformity and prevent unnecessary deaths due to drowning or injury.

We applaud and endorse Congresswoman Wasserman Schultz and her supporters, who are proposing national legislation to reduce drowning and entrapment. We believe the proposed legislation should include support for broader efforts. We urge Congress to enact legislation that rewards states who impose measures to:

1. Prevent drowning
2. Prevent entrapment
3. Prevent recreational water illness (RWI)
4. Require training and certification for people who operate and service public and private pools
5. Earmark $5 million to the CDC Healthy Swimming Program, which would include efforts to prevent drowning, entrapment and illness

**NSPF®**

The National Swimming Pool Foundation® (NSPF®) is a 41-year-old non-profit 501(c)(3) organization committed to improving public health by encouraging healthier living through aquatic education and research. NSPF® is the leading educator for pool and spa professionals who service and operate public and private pools and spas and for public health officials who are responsible for pool safety. NSPF® trained about 20,000 people in 2005, certifying 17,000. NSPF® has certified over 182,000 pool operators to date. The foundation is the leader in funding grants to prevent illness and injury, including a grant to the CDC to reduce recreational water illness. For over 30 years the NSPF® has also funded important and recognized research to understand and ultimately prevent suction entrapment. NSPF® organizes the leading scientific conference to prevent injury and illness in pools and

spas, the World Aquatic Healthy™ Conference. The Board of Directors of NSPF® voted to fund $650,000 in grants for 2006, a 30 percent increase over 2005. NSPF® funds grants to help reduce risk at aquatic facilities and has funded the CDC's Healthy Swimming Project for three consecutive years. The Foundation also is the largest funding source for grants to study the aquatic health benefits, having allocated $247,000 to Dr. Bruce Becker, Washington State University, to study the benefits of deep water exercise. Additionally, NSPF® has approved matching grant funds for Dr. Becker to study the cardiac health benefits of immersion in hot tubs.

**Rationales 1 and 2—Prevention of Drowning and Entrapment**

The Federal Government should reward the states that implement legislation including dual main drains, anti-entrapment covers, and other means selected by the health department based on current available technology. We recommend legislation not dictate specific measures since new safety technologies are constantly being introduced. Also, the state health departments are most qualified to select which levels of protection are most adequate to protect against drowning, entrapment and illness.

**Rationale 3—Prevent Recreational Water Illness (RWI)**

The CDC records the number of people affected in documented RWI outbreaks. The undocumented numbers are certainly much higher. The last CDC report (2001–2002) demonstrates approximately 1,500 people per year in the United States are affected by RWI. The CDC reported at the 2005 World Aquatic Health™ Conference that approximately 5,000 people were affected in 2005.

**Rationale 4—Require Training and Certification for Persons Operating and Servicing Public and Private Pools**

Only 19 of 50 states require people who care for swimming pools and spas to have achieved a basic knowledge in certification via a two-day training and certification class. Unfortunately, 31 states have no such provision in their laws. Lack of education for people who service residential pools as well as operate public pools invites shortcomings that can result in drowning. entrapment, illness, or other injuries. It is imperative that minimum education standards be dictated to help protect the public.

**Rationale 5—Earmark $5 Million to the CDC Healthy Swimming Program.**

The CDC has been working to prevent RWI through its Healthy Swimming Program. To support this program, which would include efforts to prevent drowning, entrapment, and illness, NSPF has provided grants over the last three years. These charitable funds have been donated in part due to the absence of a Federal mandate to fund programs that prevent drowning, entrapment, illness or other injuries at recreational water facilities. It is important that some funds be dedicated to this critical task to insure the American public can benefit from healthy activities in the water. These water activities help to prevent obesity, heart disease, Type II diabetes, and other maladies that result from a sedentary society.

We respectfully request that Congress enact legislation that provides financial incentives to states that implement codes that prevent drowning, suction entrapment, and recreational water illness and that promote education. We recommend the following:

1. At a minimum, the legislation should either remove all direct suction from the pool or spa, eliminating the risk of entrapment.

2. In the event that the pool or spa does have direct suction, dual main drains with an approved anti-entrapment cover should be required. Any additional levels of protection for entrapment or the approved levels of protection to prevent drowning should be determined by the state health departments, based on the most current information and technology available.

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PREPARED STATEMENT OF GARY S. DUREN, PRESIDENT, CODE COMPLIANCE, INC.

I am pleased to submit this written testimony for the Subcommittee's May 3 hearing on pool safety. I want to commend the Chairman, Senator George Allen, and the Ranking Member, Senator Mark Pryor, for holding this hearing.

I am a member of the American Society of Mechanical Engineers A112 Plumbing Materials and Equipment [Standards] Committee (ASME A112 Main Committee) and currently serve as the Project Team Leader/Chairman for the Safety Vacuum Release Systems for Pools and Spas Project Team (PTL A112.19.17) and as the Dep-

uty Project Team Leader/Vice Chairman for the Suction Fittings For Use in Swimming Pools, Wadding Pools, Spas Project Team (DPTL Vice Chairman A112.19.8)

In 1999, I was appointed by Florida Governor Lawton Chiles as a Member of the Florida Building Commission, Plumbing and Gas Technical Advisory Committee (FBC Plumbing and Gas TAC). This TAC has responsibility for swimming pool codes. I currently serve in this capacity having been reappointed to additional terms by Governor Jeb Bush.

**Background**

If asked ten years ago would there ever be a coast-to-coast model building code, much less a plumbing or mechanical code? The answer would have likely been, "not in our lifetime". When looking at the current state of model codes available in the U.S., it becomes clear that writing a true national model for any of the code-disciplines is a monumental undertaking. However, the International Code Council (ICC) and its I-Codes are now reality and most authorities having jurisdiction around the U.S. are beginning to utilize the I-Code models as the basis for their individual building regulations.

The entire ICC code development process is totally dependent on its volunteer system. It is an outstanding example of how it really works when self-determination and self government are left intact. We can be very proud of all of those state and local governments, contractors, architects, engineers and plain ole individuals who sacrifice their valuable time for the noble purpose of a coast to coast set of model codes.

How could all of this consolidation have occurred in such a relatively short time frame? It was due to three primary factors:

1. *No One* Wanted "Big Brother" in the Code Business.

In the late eighties and early nineties it appeared that "Big Brother" was looking to get into the building code business. Everyone actively involved in the industry knows that having the Federal Government write building codes is the last thing we wanted to see.

In November of 1989, President Bush (Sr.) announced his HOPE initiative, he asked HUD Secretary Jack Kemp to appoint a blue-ribbon commission to study government regulation that drive up housing costs for American families.

Acting on this request, Secretary Kemp created an Advisory Commission on Regulatory Barriers to Affordable Housing (See "Not in My Back Yard" Removing Barriers to Affordable Housing—1991).

The recommendations from this group were in favor of keeping the Federal Government out of the code writing business and actually encouraged state and local adoption of the Council of American Building Officials (CABO) One and Two Family Dwelling Code.

At that time, the CABO code was the first stab at a coast to coast residential code and the first time in history that the three principal code promulgating bodies, BOCA, ICBO and SBCCI joined their forces towards the common goal of a coast to coast residential building code.

2. The Design Community, Architects and Engineers alike were strongly in favor of a uniform set of building regulations.

For obvious reasons, designer professional everywhere were sick and tired of differing building regulations between state and county borders.

3. The National Association of Home Builders was strongly in favor of a uniform set of building regulations.

Once again the reasons are obvious as to why home builders would be supportive of such a concept as a uniform set of building regulations.

So in the mid nineties the climate and soil conditions were right and the CABO leadership had clear vision. They quickly seized the opportunity to move forward by establishing the ICC founding it on the noble idea of uniform building codes.

**Recommendations**

Since 1999, I have researched the issue of pool and spa related suction entrapment. I am the proponent of the minimum performance codes that are contained in the International Code Council's (ICC), 2006 International Building Code (IBC) and 2006 International Residential Codes (IRC). These respective codes are based on the CPSC guidelines found in United States Consumer Product Safety Commission Publication No. 363 009801 and currently available American National Standards Institute accredited performance standards. Specifically, the new I-Codes require all new pools to have barrier fencing, dual drains, quality drain covers, and safety vacuum

release devices (SVRS) which shut off the suction or vacuum force of pool drains in case of swimmer entrapment. These four measures form the "layers of protection" required by the I-Codes and will dramatically strengthen pool safety.

The United States Consumer Product Safety Commission has issued voluntary guidelines related to making pools safer. However, some of the current guidelines lack scientific research to back the recommendations.

Specifically the CPSC guidelines do not recommend all of the "layers of protection" now required by the new I-Codes, namely they do not recommend the SVRS devices. I believe this to be a serious mistake.

The I–Code developmental processes provide assurances that the model codes contain performance-based language as opposed to prescriptive-based requirements. The code development procedures also ensure that referenced standards cited meet strict guidelines.

I am of the firm opinion that the I–Codes are the most effective means for regulating the built environment including swimming pool and spa construction. The best thing that our government can do at this point in time is to provide strong incentives to state and local authorities having jurisdiction to adopt and enforce these important safety measures.

The I–Code developmental processes provide an open forum and level playing field where all stakeholders have input into the final product. Their models cover new construction as well as existing construction.

It is the area of existing construction that causes me the greatest concern. There are numerous pools and spas that are death traps waiting to be sprung on the innocent. Our government can do a lot to promote public awareness. Education of the public, enforcement personnel and pool and spa builders is a must. Our government must do more to help educate.

Thank you for considering my thoughts on this important safety matter.

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PREPARED STATEMENT OF GAYLE AND EVAN WEISS, POOL AND SPA SAFETY ADVOCATES

We are pleased to submit this written testimony for the Subcommittee's May 3 hearing on pool safety and in doing so we also commend the Chairman, Senator George Allen, and the Ranking Member, Senator Mark Pryor, for holding this hearing.

Here is our story: Our son, Samuel, was sucked to the bottom of an outdoor swimming pool spa while on a play date at a friend's home. Even though there was proper parental supervision, we were told that our son was literally stuck to the bottom of the swimming pool spa and was only able to escape by a fluke. Miraculously, while Samuel was praying for his life under the water his buddies managed to push sideways on his body at just the right angle to liberate him from the suction. We later learned that most adults pull on the entrapped child which in most cases will not liberate the child, but in the rare instances that such pulling does free the subject they suffer horrendous internal injuries.

We believe that G-d intervened to save our son's life and we want to return our blessing by seeking to change the laws and regulation at the Federal and State level by sharing our story.

We believe that the proposals and positions set forth by Alan Korn of Safe Kids Worldwide,on behalf of the pool safety consortium, will save lives and spare heartbreak. We are also convinced that our child's incident is a very common experience that most times goes unreported. There is no doubt in our minds that this area is grossly under-regulated in our state as well as our country. We urge the Senate Subcommittee to take the actions recommended by Mr. Korn and supported by our friend and heroine Nancy Baker this day.

This one seems so clear and easy to us. For very little cost and effort you will be saving our country's most precious assets—our children's lives.

Thank you for taking the time to give your attention to our humble request. You have the power to make a difference and protect so many people.

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