



United States
CONSUMER PRODUCT SAFETY COMMISSION
Washington, D.C. 20207

MEMORANDUM

DATE : July 21, 2004 *Revised 12/1/04*
TO : EP
Through: Todd A. Stevenson, Secretary *TAS*
FROM : Martha Kosh
SUBJECT: Public Field Hearing Concerning Swimming Pool Safety

ATTACHED ARE COMMENTS ON THE CH 04-6

<u>COMMENT</u>	<u>DATE</u>	<u>SIGNED BY</u>	<u>AFFILIATION</u>
CH04-6-1	5/26/04	Gerald Dworkin	Lifesaving Resources Inc P.O. Box 905 Harrisville, NH 03450
CH04-6-1a	6/22/04	Gerald Dworkin	Address same as above
CH04-6-2	5/26/04	Shelly Coyne	<u>Dcoyne@aol.com</u>
CH04-6-3	6/04/04	John Kupsch Technical Director	Good Housekeeping 250 West 55th St. New York, NY 10019
CH04-6-4	6/04/04	David Cheng	Keiki Injury Prevention Coalition Safe Kids Hawaii
CH04-6-5	6/07/04	S. C. Granger	<u>SusanCG@Felters.com</u>
CH04-6-6	6/07/04	Consumer	SWIMKIDS USA, INC. 2725 W Guadalupe Rd. Mesa, AZ 85202
CH04-6-7	6/14/04	Paul O'Bryne President	Florida Environmental Health Association, Inc. 12406 Kelly Ln. Thonotosassa, FL 33592
CH04-6-8	6/17/04	Theresa Seal	<u>Sealswimts@aol.com</u>

Public Field Hearing Concerning Swimming Pool Safety

CH04-6-9	6/21/04	Rich Bauer Director of Community Programs	United Phoenix Fire Fighters Association, Inc. 61 E. Columbus Ave. Phoenix, AZ 85012
CH04-6-10	6/22/04	Paul Dawson	dawson@kcnet.com
CH04-6-11	6/23/04	Jim Rowles	1821 Smith St. Las Vegas, NV 89108
CH04-6-12	6/24/04	G. Anderson	waterproofkids.com
CH04-6-13	7/07/04	Kathy Ward	3954 Buena Vista Ave. Jacksonville, FL 32210
CH04-6-14	7/07/04	Diane Holm Drowning Prevention Coordinator	Lee County Health Dept. 3290 Michigan Ave. Fort Myers, FL 33916
CH04-6-15	7/07/04	Diane Sevey	dianesevey@hotmail.com
CH04-6-15a	8/06/04	Diane Sevey	Address same as above
CH04-6-16	7/07/04	A Mittelstaedt Exec Director	Recreation Safety Institute P.O. Box 392 Ronkonkoma, NY 11779
CH04-6-17	7/21/04	Cathy Flynt	cflynt@cox.net
CH04-6-18	7/22/04	Julie Spelman	Innovative Aquatics, Inc. 1923 SE 10 th Place Cape Coral, FL 33990
CH04-6-19	8/10/04	Lea Owens	Mothers for Water Coalition 260 Blackstone Camp Rd. Beech Island, SC 29842
CH04-6-20	8/16/04	Ronald Gilbert Chairman, Foundation for Aquatic Injury Prevention	rrgjedi@aol.com
		Wendy Wawrzyniak Director of Aquatic Safety	

Public Field Hearing Concerning Swimming Pool Safety

CH04-6-21 (received 8/10/04)	7/27/04	Jan Platt Commissioner	Board of County Commissioners County Center P.O. Box 1110 Tampa, FL 33601
CH04-6-22	8/26/04	Lisa Levine	U.S. Department of State 1701 N. Ft. Myer Dr. Arlington, VA 22209
CH04-6-23	9/10/04	R. Johnson E. Johnson	<u>kpi@berk.com</u>
CH04-6-24	9/15/04	David Calabria CEO	D&D Technologies, Inc. World Congress on Drowning Amsterdam

Stevenson, Todd A.

*Drowning
Comment 1*

From: Cohn, Murray S.
Sent: Wednesday, May 26, 2004 3:51 PM
To: Stevenson, Todd A.
Subject: RE: Feedback from Online Form

Todd, here's a comment from a member of the public. Thanks, Murray

Name = Gerald M. Dworkin
Organization/Affiliation = Lifesaving Resources Inc.
Address = admin@lifesaving.com

Additions to site: Your recent publication, CPSC Warns about Pool Hazards, Reports 250 Deaths of Young Children Annually: Federal Agency Launches Drowning Prevention Initiative, Holding Public Hearings is great. However, this only pertains to residential swimming pools. The CPSC and the swimming pool and spa industry needs to address Class C Public Swimming Pools (apartment complexes, hotels, motels, etc.). There has been a consistent failure to address this market and there is a large number of submersion incidents, especially of young children, within this type of setting.

Suggestions to improve: See above. In addition, we have submitted suggestions to CPSC and the NSPI in the past regarding this matter - all of which have not been addressed.

Additional comments: Lifesaving Resources Inc.
<http://www.lifesaving.com>
P.O. Box 905
Harrisville, NH 03450
603/827-4139

Stevenson, Todd A.

Pool Drowning Comment LA

From: Information Center
Sent: Tuesday, June 22, 2004 11:20 AM
To: 'Gerald M. Dworkin'
Subject: RE: Drowning

Hello,

We have forwarded your comments to the appropriate office and if additional information is needed, we will contact you.

mlj

-----Original Message-----

From: Gerald M. Dworkin [mailto:admin@lifesaving.com]
Sent: Tuesday, June 22, 2004 7:49 AM
To: Information Center
Subject: Drowning

I appreciate the work the CPSC is doing on drowning prevention. HOWEVER, this effort seems to only deal with residential backyard swimming pools and your LAYERS OF PROTECTION is simply a repeat of the information advocated by the NSPI, because safer backyard swimming pools produce more sales for that industry.

I, personally, consult as an Expert Witness in drowning and aquatic injury litigation and have a large number of cases involving submersion incidents at Class C Public Swimming Pools (i.e. apartment and townhouse complexes and hotels and motels). Your LAYERS OF PROTECTION and your drowning prevention efforts don't touch on these incidents.

I have offered my assistance to the CPSC on a number of occasions, but have never received a reply to my letters. I strongly encourage the CPSC and the NSPI to strongly advocate drowning prevention strategies and to implement educational programs for those people who own, operate and manage Class C swimming pools.

Gerald M. Dworkin, Consultant
Aquatics Safety & Water Rescue
LIFESAVING RESOURCES INC.
<http://www.lifesaving.com>
P.O. Box 905
Harrisville, NH 03450
603/827-4139

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Stevenson, Todd A.

From: Information Center
Sent: Wednesday, May 26, 2004 1:41 PM
To: 'DCoyne@aol.com'
Subject: Drowning Prevention

Hello,

We have forwarded your comments and concerns to the appropriate agency personnel. If additional information is needed, a representative will contact you directly.

Please be advised that you may obtain CPSC publications, recalls and general safety related information via our web site at www.cpsc.gov. Click on the "Search" icon and type in your topic. You may also file an incident report via the web site mentioned above. If you have additional inquiries, you may call our toll-free hotline at 1-800-638-2772, Monday - Friday, 8:30am to 5:00pm, Eastern Standard Time. Press 1 to begin and then press 3 to speak with a representative.

tm

-----Original Message-----

From: DCoyne@aol.com [mailto:DCoyne@aol.com]
Sent: Tuesday, May 25, 2004 5:28 PM
To: Information Center
Subject: Drowning Prevention

Thank-you so much for the attention you're giving to the horrible deaths of children through drowning!

I live in Florida where such occurrences are all to frequent. I also own a couple of swimming pool supply stores, so I hear more horror stories than just what is reported on the news. Aside from the tragedy of children, you would be amazed at how many family pets are lost to drowning.

If I may make one suggestion, please, it would be to include in your prevention papers something about keeping the pool blue and clear. Most all drownings of young children happen in green, pond-like pools. I believe that instinctually, the first place a parent looks for a missing child is the swimming pool. However, if that pool is green or cloudy, you can easily overlook a child on the bottom because you can't see them.

This has been my personal campaign for many years. I have been accused by customers of simply trying to sell them merchandise, when in truth, there are legitimat safety reasons to keeping your pool blue and clear.

Thanks for taking the time to listen,

Shelly Coyne

Part of the Pinch A Penny family

www.pinchapenny.com

<----->

**My goal in life is to be as good of a person
as my dog already thinks I am**

Good Housekeeping

Pool
Drownings
hearings 3

250 WEST 55TH STREET, NEW YORK, NY 10019 * 212-649-2200 * FAX 212-649-2340

June 4, 2004

Hal Stratton
Chairman
U.S. Consumer Product Safety Commission
4330 East West Highway, Suite 724
Bethesda, MD 20814

Dear Mr. Stratton,

Thank you for the invitation to attend the public hearing on pool drownings of children under five years old to be held on June 21, 2004 in Tampa, Florida. We do not plan to attend, but please be assured that the *Good Housekeeping Institute*, one of the nation's foremost product evaluation laboratories, is concerned about the high levels of injury and death that are occurring in swimming pools across the country.

Consequentially, *Good Housekeeping* will be featuring a story in our August issue about pool safety, specifically, which pool alarms should be bought and which ones should be avoided. In recent Good Housekeeping Institute tests, we evaluated in-pool alarms for both alarm loudness and motion sensing ability. Of the three brands we tested, only Poolguard's Model PGRM-2 sounded off within 20 seconds each time a child simulator was dropped into a normal-size backyard pool. Another model, Smart Pool's Pool Eye, took longer than 20 seconds to ring and the Pool SOS alarm that we bought was defective, so we cannot recommend either model because they could be unsafe.

We believe that the ASTM Standard 2208-02 improves the overall safety of backyard pools. However, this is only a voluntary standard. In addition to pool alarms, there are other areas covered by voluntary standards, such as, gates, doors, etc. where many different products exist on the market, virtually all with varying levels of performance.

We recommend that the CPSC establish a mandatory standard for pool alarms that will hold manufacturers to the same level of performance. This would assist parents in being able to stop playing roulette with their children's safety.

Thank you for your consideration.

Best regards,



John Kupsch, P.E.
Technical Director
Good Housekeeping Institute

cc: E. Levine, R. Eisenberg, D. Weaver



*Swim
Pool
Comment 4*



Keiki Injury Prevention Coalition

SAFE KIDS Hawaii

June 4, 2004

TO: Deborah Tinsworth
CPSC Coordinator

FROM: Keiki Injury Prevention Coalition/SAFE KIDS Hawai'i (KIPC)

SUBJECT: CPSC Drowning Prevention Campaign: Strategies to Prevent Drowning Deaths

Drowning is the leading cause of injury death for children birth to 5 years of age. Most of these drowning occur in pools and bathtubs.

To encourage feedback from Coalition members on this important injury prevention issue for Hawai'i's keiki (children), KIPC held a special forum to brainstorm strategies as part of their monthly meeting on June 4, from 12 noon to 1:30 pm. Following are the recommended strategies and comments for preventing pool-related drowning:

Strategies

1. Enlist the help from the pool industry (maintenance companies, pool installers/builders, supply companies, etc.) along with realtor associations, to educate pool owners, and to report any serious "danger areas" in and around pools. Create some sort of "safety inspection sticker" for pools similar to car safety inspection stickers.
2. Create some sort of insurance break or tax credit for pool owners who are in compliance with safety standards (similar to a tax break received for solar power panels installed in people's homes).
3. Assess a small tax for swimming pools. Pool owners would pay the tax or present proof positive that they have 4-sided fencing. Put the funding from the tax into prevention efforts, i.e., learn to swim. Justification for the tax is that drowning prevention is a community injury prevention effort that requires EMS, Fire etc. to respond whenever there are drowning incidents.

Note: Even if law didn't fly, the process of introducing the bill and holding hearings would encourage discussion about drowning prevention, and the serious nature of alerting parents and caregivers to the safety hazards that could lead to drowning.

4. Need stronger warning messages, especially for parents (to address the fallibility of human behavior—"a moment of inattention can last a lifetime"). Example: standard beach signs are not always effective - perhaps a "skull and crossbones" approach to emphasize the serious nature of the problem.

5. Promote the U.S. version of Australia's successful 5 Alive Program. This "Safer Three" program is being launched this summer. Three legs of triangle of water safety are:
 - a. Preventive Barriers
 - b. CPR & First Aid
 - c. Teach Children How to Swim

Note: No evidence that CPR effective in resuscitating young drowning victims.

6. Promote the water watcher tags for parents to wear when a swimming event is being held at their pool or beach. The wearer of the tag is responsible for watching the pool until relieved by another water watcher who dons the tag. The responsibilities of the water watcher are printed on the tag. (NSKC promoted).

Discussion:

- Supported CPSC's multiple layers of protection. These are strategies that "buy" time but cannot replace adult supervision. One type of protection alone is not sufficient. In addition to four-sided pool fencing and self-closing self-latching gate, several examples were given (some with limitations), wrist alarm (water sensitive), pool covers (though these have their problems and are not a total solution) and floating pool alarm (sometimes gets set off by falling debris)

Note; One of the recommendations for Hawaii's State Injury Plan is 4-sided fencing (building code in Hawaii does not currently require 4th side to be anything other than the house or adjoining building).

- Adult supervision - vitally important (don't make older siblings responsible for young children). Educate the public re. age and developmentally appropriate expectations of children.

- Make sure any toys in or around pool are cleaned up and locked up. They are an incentive for toddlers to try to get into the pool area.

- Public awareness of the misconception that children splash and scream when they fall into the water. Drowning is usually a silent killer. Additionally, when children fall into a pool, they usually sink to the bottom versus floating on the water's surface.
- Pediatricians are already participating in giving parents many prevention messages, including water safety when family comes in for visits. It's part of their list of "anticipatory guidance" tips. Problem - as the child gets older, the visits are less frequent.
- One of participants recapped her own near drowning experience, and recommended that when teaching keiki to swim, make sure they get the message, "Don't Panic!" Although panicking is more a reflex, teaching children how to respond in the event of a drowning, could be included as part of water safety instruction.
- Hawaii's Child Death Review will provide additional information on drowning circumstances that can be translated to more effective prevention efforts. Some of contextual questions about drowning include: "Was there pool fencing, and was it 4-sided? Were there other protective measures in place such as self-latching gates, etc.?" "Did the child know how to swim; had he or she received swimming lessons?"

Stevenson, Todd A.

From: Cheng, David G.
Sent: Wednesday, June 09, 2004 5:10 AM
To: Tinsworth, Deborah K.
Cc: Nava, Frank J.; Stevenson, Todd A.; Elder, Jacqueline
Subject: Summary of strategies for pool public hearings

Debbie,

Please see attachment for swimming pool safety strategies from the local Safe Kids coalition.

Thanks,

David Cheng
808-733-8710

Attached is a summary of the recommendations and discussion on strategies for pool drowning prevention for the CPSC public hearings from last Friday's KIPC meeting. Thanks to all of you were able to provide input.

Please review and email any comments or changes to David Cheng, CPSC representative for Hawaii at DCheng@cpsc.gov, by no later than Wednesday morning, June 9th. David got approval to extend the original deadline of June 7th.

For details on the public hearings, see:

<http://www.cpsc.gov/BUSINFO/frmotices/fr04/poolmtg.pdf>

Therese M. Argoud
Hawaii State Department of Health
Injury Prevention
Tel: (808) 586-5941
Fax: (808) 586-5945
E-mail: tmargoud@mail.health.state.hi.us

6/9/2004

*Pool
Drowning
Comment*

5


Stevenson, Todd A.

From: Information Center
Sent: Monday, June 07, 2004 1:21 PM
To: 'SusanCG@Felters.com'
Subject: Please add this water safety tip to your website and literature

Hello,

Thank you for contacting the U.S. Consumer Product Safety Commission (CPSC). We have forwarded your valuable comments to the appropriate agency personnel.

Please be advised that you may obtain CPSC publications, recalls and general safety related information via our web site at www.cpsc.gov. Click on the "Search" icon and type in your topic. You may also file an incident report via the web site mentioned above. If you have additional inquiries, you may call our toll-free hotline at 1-800-638-2772, Monday - Friday, 8:30am to 5:00pm, Eastern Standard Time. Press 1 to begin and then press 3 to speak with a representative.

myg

-----Original Message-----

From: Crow-Granger, Susan [mailto:SusanCG@Felters.com]
Sent: Monday, June 07, 2004 12:33 PM
To: Information Center
Subject: Please add this water safety tip to your website and literature

This safety tip is submitted in the name of Claire Hennigan, a five year old near drowning victim who was thankfully resuscitated and is now well and normal. Please add this tip to your website for parents of children under 6. Buy only very brightly colored swimsuits for your young child, so they are easy to see in the water. Claire was wearing a light colored suit that blended in with our pool liner, and three different adults could not initially see her lying on the bottom of the pool. Of course, wearing personal flotation device is the most important safety tip, but this is meant to be supplemental info. A bright suit is something we never thought of until we experienced first-hand the difficulty of seeing someone through 10 feet of water in a pale swimsuit. Please have a safe summer.

*Drowning
pool
commitment 6*

Statement of the Problem

Over the last twenty years drowning has remained one of the major causes of accidental death of children in the United States. And the number 1 cause of accidental death in children under 5 in Arizona. The tragedy of pool drownings, unlike car accidents, is that they are almost always preventable. The solution to this huge problem is adequate fencing, parent education and the effective training of young children in aquatic survival techniques. This essay will address the issues of effective aquatic survival training for children under the age of 5, including: (1) the techniques and credentials of those offering survival training, (2) the best ages to introduce water safety lessons, (3) realistic performance goals needed in aquatic lessons, (4) non-traumatizing methods desired in training young children aquatic skills, (5) appropriate sequencing required for skill mastery in survival lessons, and (6) long term retention and over-learning that needs to be incorporated into aquatic survival skills training.

The Internet is full of information about swimming lessons for small children that claim to "set the standard" in water survival instruction. There is a tremendous range of expertise and abilities among the different approaches and their instructors. There are no real national standards in this industry. Although, there are organizations that have very rigid standards that train and certify instructors, continue with the education of their instructors and serve to advance the industry of aquatic survival training.

The Swimkids' USA method has been nationally recognized for its expertise in teaching, testing and establishing norms for aquatic survival skills for young children. Developed in 1971, our method is the result of 7 years of Arizona State University research and 33 years of empirical data. Swimkids founder, Lana Whitehead has a B.A. Degree in Exercise Physiology and Masters Degree in Special Education. She has authored several aquatic books, swimming videos and lectured nationally for professional educational forums. Lana and her staff continue they're training yearly at the United States Olympic Training Center and USA Swimming, at United States Swim School Association workshops, in World Aquatic Baby Congress Seminars, and at American Red Cross re-certification classes in Lifesaving, CPR and First Aid for the Professional

Rescuer. The Swimkids' method has trained over 50,000 children in one of the most effective aquatic survival techniques in the Nation.

The issue of when to introduce youngsters to water has been debated for years. The Council for National Cooperation in Aquatics (CNCA), comprised of 36 national member organizations (e.g. Red Cross, YMCA, YWCA, Park and Recreation Associations, etc.) and the American Academy of Pediatrics (AAP) have issued statements that recommend "minimum age for organized swimming instruction be set at age 3" (AAP, 1982; CNCA, 1973).

Developmentalists suggest that we should view development as an interaction between genetic factors and environmental experience and not as a maturation hypothesis gathered from generalizations regarding children's motoric & cognitive stages. Stephen Langendorfer (1986) has stated that use of an automatic age limit or range is often not advisable from a developmental point of view, and that "motoric repertoire of the 1 to 3 year old holds many similarities between the development of upright locomotion and independent swimming" (p. 42). Langendorfer suggests that an age range of between "12 and 18 months, or the onset of independent walking, represents a starting point for swimming instruction consistent with motor development literature" (p. 42). Research to date, specific to the appropriate age to introduce water safety skills to young children was conducted during the 1970's at the Infant Swimming Research in Florida (Barnett, 1972) and the Swimming Institute of Munich Germany (Gebhardt & Bauermeister, 1970). Barnett, a physical educator, who has conducted 26 aquatic research studies at the Infant Swimming Research in Florida, recommends 12 months to begin teaching a young child to roll over and float (Barnett, 1972). Results from a longitudinal study conducted by the Swimming Institute of Munich Germany suggest 22 months as the recommended starting point for appropriate mental maturity and physical agility to execute swimming survival skills. The Swimming Institute of Munich Germany conducted this four-year research program with 669 children (237 up to 12 months, 225 from 13 months to 3 years, 207 from 3 years to 5 years) in an effort to collect extensive data on when and how to teach swimming to very young children.

Performance goals used in aquatic survival programs should promote independent mobility, safety and survival skills (breath holding, then blowing bubbles, floating,

rotating from front to back, kicking to the steps and side, and climbing out), and water adjustment. At Swimkids USA, Inc., we introduce 8 to 18 month olds to the water in parent/tot classes that teach basic aquatic survival skills while encouraging bonding between parent and child. Children who begin swimming at 18 to 22 months are taught to swim to the side or step, jump into the water, rotate onto their backs where they can float alone and cry for help. Once a child has mastered the beginning survival subtasks, he/she can progress to an advanced sequence of, swimming the length of the pool while rotating onto their backs to breathe and rest, alone. This entire process can take anywhere from 10 to 40 lessons depending on the young child's age and familiarity with the aquatic environment.

Traumatizing methods used in instruction have become a source of great controversy and concern to the American Academy of Pediatrics (1982), and the California Medical Association (1984). Both institutes have issued reports stating that any method, which traumatizes children, is highly inadvisable. Threat, compulsion and punishment can be traumatizing. Acceptable methods utilize purposeful play in a nurturing environment. Well sequenced, activities geared for instruction, enjoyment and developmental levels of children will create an atmosphere of learning (CNCA, 1973). The benefit of activities and games in a nurturing, water safety environment is viewed as highly beneficial and rewarding. At Swimkids, criterion skills are assigned a key word and activity that represent and cue specific responses. For example, the word "pop" could signal a child to dive to bottom of pool, pick up a colored ring, push off the bottom, climb to the surface, rotate to the back and float in "airplane". Airplane is the key word for back floatation. The child floats in a supine position, legs straight, with his arms directly out to the side of his body like airplane wings. The child is then trained to fall in to the water fully clothed, rotate on to his back to rest and breathe and rotate to a prone position to swim to the safety of the wall or stairs. When we ask our students what they would do if they fell in the pool, they yell, "Airplane", while flinging their arms into the back float position. The total aquatic experience can become one of enjoyment, achievement and success.

In teaching very young children, structure and order are essential. The teacher must assess the student's current level of performance, define precisely the skill to be

learned, and skills must be ordered in an appropriate sequence (Howell & Morehead, 1987). Researchers, McKenzie and Jaks (1984) believe that very young children typically progress in very small steps, so it is essential to break a gross motor task (such as aquatic survival skills) into small easy-to-teach subtasks with task analysis. Each subtask or skill is then stated in its appropriate order of occurrence and sets the occasion for the occurrence of the next behavior (sequencing). Swimkids has engaged in comprehensive research projects at Arizona State University to develop empirically based techniques that are well sequenced and task analyzed. In our aquatic survival program, a student must master one skill before moving up the sequence to the next skill. This philosophy fosters confidence and builds self-esteem while the child is learning self-discipline, focus and persistence.

Children's retention of swim skills must also be addressed. The California Medical Association (1984) in its official statement on risks of toddler swim programs reports, "parents cannot expect their toddlers to learn and remember the rules of true water safety or know how to act in an emergency" (p.1). Basically, skeptics agree that some two year olds can swim across the pool, but one cannot expect them to behave appropriately in water emergencies (Micheli, 1985). The California Medical Association, however, has failed to recognize some very basic learning principles, that if applied correctly could further skill retention in a small child and train him/her to respond appropriately when falling into a vacated pool. Dr. Howell (1987) describes these basic learning principles or proficiency levels as: (1) accuracy (proportion of items or skills done correctly), (2) mastery (fluency or rate with which items or skills are done correctly), and (3) automaticity (ability to maintain a correct and fluid display of knowledge or skills under varying conditions).

When students begin to learn skills they must allocate so much attention to tasks that even slight distractions will affect the accuracy and the rate at which the skills are performed. At Swimkids, once the skill has reached the accuracy level the rate at which the task is performed is increased until the task is mastered. This practice beyond the criterion of one perfect trial while increasing the rate has an enormous effect on subsequent retention. Our Swimkids' students must practice airplane (back float sequence) over and over, increasing the rate at which the skill is executed correctly until

it is mastered. Once the child can perform “airplane” alone, accurately and quickly, we add varying conditions (clothes, different pools, no instructor etc.) to see if he/she is automatic (can do it without thinking about it). For example, when a child who is trained just to accuracy and mastery in the “Airplane”, jumps into the pool fully clothed for the first time, the subject usually forgets a step or two of the floating sequence because he/she is so pre-occupied with the shock of wearing clothes (a varying condition). Therefore, children must be taught beyond mastery to automaticity (over-learning) in order to perform accurately and quickly under real-world conditions, such as a child falling into a pool with no adult supervision. The student continues to work on the accuracy and mastery of “airplane” until he can demonstrate the skill alone under real-world conditions for at least 4 lessons. Students who can work well under varying or real-world situations are assumed to have better knowledge and skills than students who can only work under one condition. When he/she has passed the automatic level in “airplane”, he/she progresses to our advanced sequence of swimming the length of the pool rotating to the back to breathe and rest. Water survival methods must teach students to the automaticity level in order for them to retain their skills and transfer their learning outside of swim class. Hall (1982), Krueger (1929), Postman (1962), Fitts & Posner (1967) and Howell & Morehead (1987) substantiate this theory with research studies that demonstrated that over learning (automaticity) significantly influences retention from 50% to 95%-100%.

References noted in this paper were taken from my Master’s Thesis at Arizona State University, May 1991. If you would like a copy of the bibliography or have any questions regarding the research, please contact me (Lana Whitehead) at Swimkids USA, Inc., 2725 W. Guadalupe Rd, Mesa, Arizona, 85202-7236, ph (480) 820-9109, fax (480) 820-3590.

FLORIDA ENVIRONMENTAL HEALTH ASSOCIATION, INC.

An affiliate of the
National Environmental
Health Association



Organized
October 12, 1947

A non-profit association serving the environmental health profession in the State of Florida

June 14, 2004

Dear Meeting Coordinators,

Your meeting topic is of interest to our group- the Florida Environmental Health Association. We have also noted the importance of this issue of pool safety and childhood drownings. To assist with this problem, we professionally produced a short- thirty (30) second Public Service Announcement (PSA) for TV on this topic and have made it available to many of the major television stations around the state of Florida. Unfortunately, without anyone pushing the issue as a hot news item, the tapes are likely sitting on a shelf at the stations and not being aired as they should, so we might make a difference and save some lives.

With that said, I would like to offer our services to present the PSA at your meeting in Tampa June 21st, and/ or send you a copy to view yourself to see if it may be useful in this process. It is available both in VHS and Beta format (for TV). So, if you would like to show it at the meeting you will need a VCR and TV. Please let me know how we might assist you with your efforts. You may contact me via email paul_o'byrne@doh.state.fl.us or phone (863) 499-2550.

Thank you,

Paul A. O'Byrne, R.S., M.P.H.
President
Florida Environmental Health Assoc.

Stevenson, Todd A.

*Drownings.
Swim
Comments* 8

From: Tinsworth, Deborah K.
Sent: Thursday, June 17, 2004 4:13 PM
To: Hammond, Rocky
Cc: Stevenson, Todd A.; Elder, Jacqueline
Subject: FW: Drowning Prevention

Here is another set of comments. Theresa Seal will try to attend, but will not be making a formal presentation...

Debbie, I forgot to sign my e-mail so if I think of anything else I will forward. Thanks again, Therese C. Seal, Seal Swim Schools/TampaBay

I also think that we should have one main agency instead of so many different areas of expertise with the same motives.

-----Original Message-----

From: Sealswimts@aol.com [mailto:Sealswimts@aol.com]
Sent: Thursday, June 17, 2004 3:59 PM
To: Tinsworth, Deborah K.
Subject: Drowning Prevention

Debbie, it was good talking with you this afternoon and I have listed a few of my concerns:

The American Academy of Pediatrics states that children should not take swimming lessons until they are 4 years of age, however, high risk of drownings are our two year old males. It is also interesting that 99 percent of the pediatricians in our community tell their clients to get their little ones into swim lessons and hand out our literature.

The ARC has a great program for children ages 3 to 7 called Whales Tales, but no one promotes it including our local ARC. We have reached over 10,000 children a year in the Tampa Bay area with the Whales Tales program without any acknowledgement from the ARC, and we have done this at our own expense. Its a great program, reaches the children at their own level, but, quite frankly, it is too expensive for us to continue.

Life jackets (children's included) should be in the bright neon colors or red, however, they are in the stores in pale pinks, blues with characters on them, etc. If I needed the Coast Guard to spot me in the water in an emergency, I certainly wouldn't want to have one of the pale colored ones on.

Florida is the only state in the United States that requires swimming instructors to have a national certification. When I started teaching, I could have been a plumber looking for extra work. It is important and I believe a great policy that the rest of the states should follow.

*and
out
warrant* 9

United Fire Fighters Association, Inc.

61 E. COLUMBUS AVE. • PHOENIX, AZ 85012 • (602) 277-1500 • FAX (602) 277-0003



June 21, 2004

Mr. Hal Stratton
U.S. Consumer Product Safety Commission
Washington, DC 20207

Dear Mr. Hal Stratton;

On May 4th 2004, we received notification of hearings to be conducted in the City of Phoenix with regard to the issue of child drowning, and drowning prevention. The United Phoenix Firefighters Association has been involved in the prevention of child incidents since 1988 when we started our Save-R-Kids Campaign. This Campaign is heavily concentrated on child safety issues, car seats, drowning prevention etc.

Starting Memorial Day of 2002 The UPFFA has partnered with several Community Businesses including Leslies Pool Supplies and SRP, and together we have installed over 100 pool fences, to qualifying families, to provide barriers from the house to the pool in an aggressive attempt to bring the number of childhood drowning down.

Since 1988 The UPFFA has been conducting and certifying people in CPR, First Aid, and now a new curriculum to certify young adolescence as Certified Baby Sitters. All of these are designed to develop "Safety Minded Behavior Habits".

The UPFFA have done numerous different attempts at bringing childhood drowning down, including PSA's, Safety Fairs and "Catchy Phrases" to bring awareness to our community. Unfortunately sometimes these Catch Phrases become like elevator music, nothing more then background noise, and the bottom line is, they don't work. The one thing proven to work is a barrier between the house and the pool. Nothing can beat, eye on eye contact with your child, however this is not always possible in today's busy life. The next best thing is a pool fence, to code, with a self-closing, self-latching gate, between the house and the pool.

To the best of my knowledge, The UPFFA is the only Firefighter organization in the country, taking this aggressive action in the prevention of child drowning.

The Letter we received from Commissioner Stratton also asked what could CPSC do to prevent and reduce childhood drowning.

Here are some of our recommendations.

- 1) Assist with lobbying for Sate Wide Laws requiring pool fences to homes with children 6 years and under residing there, or any caregiver of a child 6 years of age or under. This is no different then car seat laws that are already in effect, and enforced in this state.
- 2) Provide funding and resources for educational programs to help develop this safety conscious behavior in young adults.
- 3) Provide funding for barriers, pool fences, in homes for families that have a financial hardship.

In closing we feel the program that I have outlined has aggressively provided punitive steps to reduce and prevent drowning in our cities.

Enclosed is and article that appeared in The Arizona Republic on Friday June 18th 2004 about our efforts.

Please feel free to contact me for any other information, and please visit our web site at www.SaveRKids.org

Thank You,



Rich Bauer

Director of Community Programs
United Phoenix Firefighters Association
602-277-1500
rbauer@phxfirefighters.org

cc: Ms. Rocky Hammond
Deborah Tinsworth



Randy Smith of Flamestead Vinyl Products installs the pool fence at Dora Molina's home in Avondale on Thursday. Molina is getting the work done through the Adopt-a-Fence program to safeguard her two grandchildren's lives. Suzanne Starr/The Arizona Republic

Pool-fence program bestows gift of security

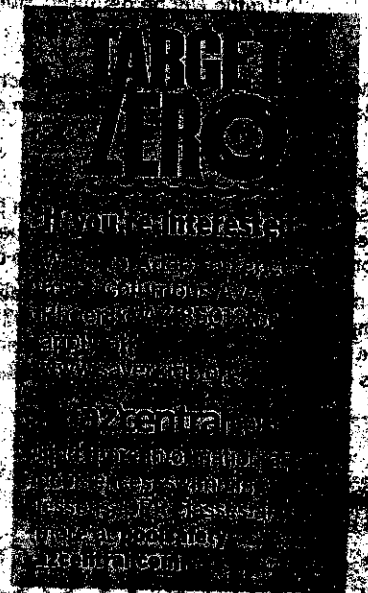
By Holly Johnson
The Arizona Republic

Dora Molina's two sons left home and she thought her days of raising children were over. But when she was left with custody of her two young grandchildren, and the 58-year-old Avondale woman had a new problem.

She had a pool that needed a fence. But she had no way to pay for it. "I was scared," Molina said. "I just thought, 'What am I gonna do?' I had so many other things to take care of. I didn't know how I could get a fence."

That's where the United Phoenix Firefighters Association's Adopt-a-Fence program stepped in. The initiative provides free fencing and installation to families who own a home with a pool, have children younger than 6 and express financial need.

Adopt-a-Fence, now in its third year, began with Phoenix fireman Rich Bauer, the program manager, prying door-to-door, soliciting donations. At first, the going was



See E001 Page B2

the 2019 ni an photo

tough, and pool suppliers didn't seem interested. But when Leslie's Pool Service of Scottsdale agreed to install a 4-foot fence or one a week before Memorial Day and Sept. 1, his luck turned around.

Community support doubled efforts the following year. In 2003, the program gave away nearly 30 fences, and he still hopes to make that figure this summer.

Firefighters recognized the need for better safety measures and set up Adopt-A-Fence program.

"It always seemed to be the same story. We'd go on a drowning call, and always there was no pool fence," Bauer said. "People would turn their backs for seconds and their children would be gone. There was just no barrier between the house and the pool."

Firefighters across the Valley have responded to six child drownings this year. Nine children drowned in the Valley in 2003.

Phoenix Assistant Fire Chief Bob Khan said reducing the number of child drownings requires a combination of pool supervision and knowing proper rescue methods.

Fatal accidents, Khan says, are usually tied to either no pool fence or a faulty pool fence.

When Bauer heard of Molina's situation, he immediately made the necessary ar-



Dora Molina talks with fence installer Randy Smith on Thursday as her pool fence takes shape. She had no way to pay for the fence but safety dictated the need.

rangements. At 7 a.m. Thursday, crews began installing the 6-foot fence as Alex, 3, and Chuco, 6, chattered, coincidentally, about an upcoming swimmer.

For Molina, the fence's installation marked one of the last steps she will take to assume legal custody of her son's children. She has childproofed her suburban ranch home, enrolled Alex and Chuco at a nearby school and arranged for her fiancé

and sister to baby-sit while she waits to bles at night.

"I feel excited about this," Molina said. "People at work look at me like I'm crazy, but I just tell them I love my family. Those babies have been to hell and back, and I owe it to them to raise them."

Reach the reporter at holly.johnson@arizonarepublic.com or (602) 444-4727.

*Pool downing
comment* 10

Stevenson, Todd A.

From: Information Center
Sent: Tuesday, June 22, 2004 2:30 PM
To: 'dawson@kcnet.com'
Subject: kids downing

Hello,

We have forwarded your comments to the appropriate agency personnel. If additional information is needed, a representative will contact you directly.

Please be advised that you may obtain CPSC publications, recalls and general safety related information via our web site at www.cpsc.gov. Click on the "Search" icon and type in your topic. You may also file an incident report via the web site mentioned above. If you have additional inquiries, you may call our toll-free hotline at 1-800-638-2772, Monday - Friday, 8:30am to 5:00pm, Eastern Standard Time. Press 1 to begin and then press 3 to speak with a representative.

tm

-----Original Message-----

From: mayfield fancy [mailto:dawson@kcnet.com]
Sent: Tuesday, June 22, 2004 2:40 PM
To: Information Center
Subject: kids downing

here's an idea. teach kids how to swim. i learned at three. if you have a pool in your backyard there is no excuse for not teaching your kids how to swim. paul dawson kansas city, missouri

6/23/2004

*Swim pool
drowning
comment*

11

Stevenson, Todd A.

From: Information Center
Sent: Wednesday, June 23, 2004 4:08 PM
To: 'jandjrowles@juno.com'
Subject: Children drowning in swimming pools

Hello,

Thank you for contacting the U.S. Consumer Product Safety Commission (CPSC). Your comments have been forwarded to the appropriate agency personnel. If additional information is needed, a representative will contact you directly.

Please be advised that you may obtain CPSC publications, recalls and general safety related information via our web site at www.cpsc.gov

Click on the "Search" icon and type in your topic. You may also file an incident report via the web site mentioned above. If you have additional inquiries, you may call our toll-free hotline at 1-800-638-2772, Monday - Friday, 8:30am to 5:00pm, Eastern Standard Time. Press 1 to begin and then press 3 to speak with a representative.

tm

-----Original Message-----

From: james a rowles [mailto:jandjrowles@juno.com]
Sent: Tuesday, June 22, 2004 11:51 PM
To: Information Center
Subject: Re: Children drowning in swimming pools

Have the damn parents train the kids to swim, or get swimming training.

Next, those motorized scooters available from many outlets will be blamed for children injuries/deaths when the fact is the parents did nothing in the way of training.

MAKE PARENTS RESPONSIBLE !

PERIOD

Thank you, Jim Rowles
1821 Smith St
Las Vegas, NV 89108

*Swim
Safety
Comments*

12

Stevenson, Todd A.

From: Tinsworth, Deborah K.
Sent: Thursday, June 24, 2004 5:51 PM
To: Hammond, Rocky; Stevenson, Todd A.
Subject: FW: water safety
Follow Up Flag: Follow up
Flag Status: Flagged

Could you please add this to the pile of public comments? Merci beaucoup! Deb

-----Original Message-----

From: Ross, Mark K.
Sent: Thursday, June 24, 2004 8:50 AM
To: Tinsworth, Deborah K.
Subject: FW: water safety

Here's another note commenting on Pool Safety.

Mark

-----Original Message-----

From: Gaylene Anderson [mailto:gaylenea@hawaii.edu]
Sent: Wednesday, June 23, 2004 10:32 PM
To: Ross, Mark K.
Subject: water safety

Hi Mark,

I wanted to write the CPSC and give a comment on this subject. Last month I was invited to attend the local Hawaii chapter meeting to talk about water safety and what could be done. As you know, Hawaii is a state with enormous amounts of pools, beaches, and water related activities. The State Health Department and City and County Lifeguards do a great job with public service announcements but it is not enough. Most of the information that is distributed talks about watching your children around water or putting up barriers (gates, alarms, etc.). This is important but I believe parents need to also hear that they MUST teach their children how to swim from the earliest age possible.

I have been a swim instructor/swim coach for 18 years and have worked all over the country. Before moving to Hawaii, I was living in Alabama and working on a Masters in Health Education. Living in the South, I learned that there are a lot of people that simply do not have access to swimming lessons or water safety information. I decided to make a video that would teach parents the basics and could be distributed nation wide in places like Wal-Mart/K-Mart and sold next to the water toys...not hidden in the video section. The video is called Waterproof kids and it is currently available online at www.swiminfo.com and targeted to be in Wal-Mart stores Aug. 1, 2004. I share this with you in hopes that the CPSC will also recognize the need for more educational tools available to the public. If you would like more information on the DVD or the Campaign it is attached to, please see the below websites. Thank you for your time.

Cheers,

Gaylene Anderson
 Waterproof Kids
 (808) 221-5483

www.waterproofkids.com
www.safer3.org

6/25/2004

www.waterpals.com

Swimming
Pool
Comment

13

US consumer products commission
Office of the Secretary
4330 E.W. Highway
Bethesda, MD 20814

To all concerned with swimming pool safety:

My name is Kathy Ward and my grandchild McKenzie Merriam drowned in her backyard swimming pool at only 18 months old. There were no barriers between herself and her pool . Since this has happened, I view swimming pools very differently, They are not beautiful to me, all I see is a death trap for a young child.

We live in Florida where there are many backyard pools, and more built each day. Parents do not think this can happen to their child because they watch their child. This is what my daughter Debbie said to me every time I talked about how worried I was about the swimming pool.

My daughter Debbie tried to kill herself after McKenzie drowned, because she said It was all her fault. She only let her out of her sight for a short while. Parents do not realize it only takes a few minutes for a toddler to get out of sight and into a pool..

I worked on the Preston DeIbern, McKenzie Merriam residential swimming pool safety act for 3 years. When it went into law in October 2000, I felt so good that we were going to save many children from this horrible death.

I was so wrong in my belief that this is all we had to do. We need so much more to save these children.

First of all parents need to change their thoughts about that pool. They need to always think of it as a killer of children, just like they would think of a loaded gun with a child.

We need stricter laws all over the US about pool safety . We need billboards on every highway about swimming pool safety. We need pool companies to have signs up about swimming pool safety. Swimming pools are more likely to kill your child under the age of 5 than a car accident, cancer or any other cause of death you can think of.

Many of these children do not die, they suffer brain damage , and have a very short life. Most of these swimming pool drowning or near drowning are preventable.

I hope we can come up with a plan to stop these little children from drowning. I will do anything I can to help. I do not want any family to have to experience what mine has with our loss of McKenzie.

I have enclosed a picture of McKenzie as well as article cut out of the paper.

Regards,

Kathy Ward
3954 Buena Vista Ave.
Jacksonville, FL 32210

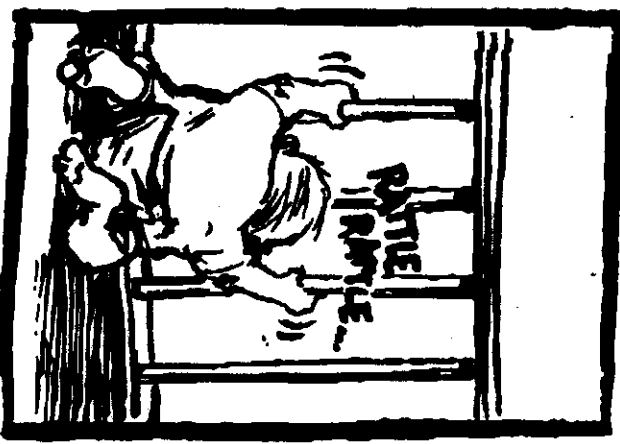




THE GOVERNMENT
SAYS I HAVE TO
INSTALL THIS
★@#%&*
FENCE!!



SELF-LATCHING GATES,
DETAILED DRAWINGS,
AND THE COST!!!
WHAT'S THE
BIG DEAL??!!



©1999
COUNT
LIM
TAN

~~Stevenson, Todd A.~~

Pool safety
comment 15

From: Diane Sevey [dianesevey@hotmail.com]
Sent: Wednesday, July 14, 2004 10:45 PM
To: publicinformationofficer@scfaz.com; Council@cityofmesa.org; phil.gordon@phoenix.gov; john_mccain@mccain.senate.gov; mfwsc@hotmail.com
Cc: vcondit@hs.state.az.us; Tinsworth, Deborah K.; Hammond, Rocky; Stevenson, Todd A.
Subject: Good evening

Good evening to everyone. I wanted to address an issue that I do believe could aide in our fight for the change in the Pool Fencing Laws for Arizona. As I emailed before, I got a copy of the police report for my son's death. He drowned in our neighbor's unfenced pool on 3-29-04. In the report the neighbor admits to a police officer that he only locks his gates when his family goes out of town. My neighbor also is questioned why his pool was so unkept.

Earlier I had questioned legislatures on how we can say we cannot impede on property owner rights, but yet still hold them responsible when something, such as my son's death, happens. M.A.D.D. came about the same way. An irresponsibile drunk driver killed someone and now there are stricter laws and more campaigns to discourage drunk driving.

We need stricter laws in the State of Arizona. Had we lived in a newer neighborhood my neighbor would have been fined at the least. For not having his gate in proper working order. The point is not to prosecute people, but to let them know that they cannot be irresponsible. If they have a dangerous weapon, such as a pool on their property, they need to take the proper measures to ensure that all home occupants and neighborhood children are safe. We cannot continue to rely on the homeowner to make the needed decisions. Ecspecially when it comes to an epidemic such as this. I feel that they think the same way I used to, nothing will happen to them.

When you have a neighborhood full of children, you have got to do everything to protect them. All of us. With my neighbor admitting to the Police Officer that he never locks his gate, that is no different than the drunk driver getting behind a wheel and killing someone. The only difference is, the drunk driver gets manslaughter and I am told, we are so sorry for your loss but the newer homes have great pool fence laws!

We need all cities to maintain the same pool fence law. We need ALL neighborhoods to be involved. No grandfathering. If people know that if they do not keep up with the maintenance of their pool, if something happens they could be fined or put into jail, it just might encourage people to install a fence. Install locks.

I would be happy to send anyone a copy of the report. To see how senseless it all is. Had we lived in a newer neighborhood, his gate would have had to open out towards the street. Even if his gate was not locked, Derek would not have been able to push his way into the backyard. Derek and all of the other children out there are just as important as the person that is killed by a negligent, drunk driver. And they deserve a fight. For the children that are still here, they deserve the chance.

Warmest regards to everyone,

Diane Sevey
www.derekslaw.com
www.mfwsc.com- Harley's law

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Pool safety

14

Swimming Pool Hearing
Diane Holm
Drowning Prevention Coordinator
Lee County Health Department
3290 Michigan Ave.
Fort Myers, FL 33916

Phone (239) 332-9590 FAX (239) 332 9605 E-mail Diane_Holm@doh.state.fl.us

What has worked to prevent swimming pool drownings of young children – and why?

1. Out of reach door locks (dead bolts, chains), properly installed, regularly used can keep children indoors while parents/care givers are not 100 percent focused (using the restroom, cooking, cleaning, attending to other children) on watching children.
2. 4-sided isolation fencing, with self-latching, self locking gates, properly installed keeps toddlers out of pools when they go outdoors.
3. Discipline and knowledge keep children out of the water by helping them gain an understanding that water is not safe, just as crossing the street without an adult is unsafe.
4. Swimming and water safety education and skills in children can enable them to keep their heads above water when they get into a pool, find a safe hold on the side, and exit safely without assistance at a young age. It can also keep them out of the water when performing a rescue of another child.
5. Swimming and water safety education of parents/care givers to prevent access unless constant adult supervision is present keeps children safe. Exposure to techniques of clearing a blocked airway and CPR can help prevent drowning death.
6. Legislation requiring barrier codes for all new and re-sale homes, with appropriate inspections to gain a Certificate of Occupancy or bill of sale.

What's not worked

1. Expecting parents/care givers to keep constant adult supervision 24-hours a day; 7-days a week. Parents need breaks, parenting styles are inconsistent, verbalization skills vary, too many assumptions are made.
2. Inconsistent messages, at inconsistent intervals create confusion about what is safe and what is not. Vocabulary should be clearly defined, and consistently used, in addition to safety messages developed with clear repeatable messages.
3. Development of statistical data has been inconsistent, confusing and incomplete, because there is no uniform reporting system.
4. The removal of lifeguards from beaches and pools to prevent lawsuits and encourage greater vigilance by parents/caregivers has not prevented drownings. Instead it has limited access to those who care to use the water but can't afford swimming/water safety lessons and rewarded the careless attitude of those who choose not to use facilities safely.

How to reduce drownings

1. Create more warning labels on packaging of "kiddie" and all above-ground pools, pool toys and pool supplies.

2. Create uniform reporting system for drowning deaths and submersion injuries.
 - Needs to be consistent from police to EMS to hospital to state DOH
 - Needs circumstances surrounding drowning reported
 - Needs specific information regarding supervision
 - Needs specific information on education
 - Needs local code requirements
 - Needs location of pool, and child immediately prior to incident
 - Needs identification of drain, pump, etc. equipment in use during incident
3. Encourage legislation.
 - Create recommendations for consistent barrier codes, laws, and regulations for new pools, spas
 - Create laws requiring existing pools to be brought up to code
 - Create laws requiring 5-year inspections of safety barriers
 - Create laws requiring anti-suction/anti-entrapment device installation
4. Encourage swimming and water safety education for children as part of their toddler and pre-school education.
5. Encourage swimming and water safety education for adults as part of the childbirth education program, and annual parent participation requirement in toddler and pre-school education programs.
6. Have permanently imprinted safety messages on filtration/pump system.
7. Encourage convenience in product development since it's the primary factor determining frequency of safety product use.

Suggested educational approaches

- Public information has been successfully disseminated through the media, McDonald's Restaurant tray liners, swim instructors, boating instructors, volunteers on open water and in schools, and through public and private school teachers.
- Children and parents/care givers should be the primary target, with all adults a secondary target
- Education should be multifaceted including hands on, requiring creation of art work, statistics, expert spokespersons, instructors, visual aids, books, flyers, transportation, swim suits, towels, educational aids including electronics, development of promotional products
- Allocate tax dollars at a federal, state, and local level; develop grant funding from civic groups.

Pool comments 15a

Stevenson, Todd A.

From: Diane Sevey [dianesevey@hotmail.com]
Sent: Friday, August 06, 2004 10:45 PM
To: atroy@abc15.com; Council@cityofmesa.org; Stevenson, Todd A.; Dan.Siegel@kpho.com; assignments@fox10.com; phil.gordon@phoenix.gov; TIsaacson@phoenixchildrens.com; jared@bluemp.com; john_mccain@mccain.senate.gov; mfwsc@hotmail.com
Subject: A copy of what we are printing out for the local companies to pass out



pool.jpg (119 KB)

Please log onto www.derekslaw.com and <http://derekgonzalez.bravehost.com/index> to learn more.

My name is Diane Sevey and my fiance is Dan Gonzalez. We are the parents of a very special 3 year old little boy who lost his life on 3-29-04. He drowned in an unfenced pool. We are here to warn you of the dangers and responsibilities a pool carries with it. We need you to know that it can happen to you. It can happen in your home. We thought that by not having a pool in our home, we had eliminated the danger. We could not see the silent killer from our back door, so we figured we were safe. We want you to know that we were very wrong and our baby is gone. We never thought our son would wander away from home without us. We had taught him differently. He knew not to go out front. We felt safe in the way we raised our kids. It was okay to let them play alone in their rooms, it was okay for us to go to the bathroom while they watched TV. We thought we were safe. We learned that no matter how good of a parent you are, the unthinkable can still happen.

Losing Derek opened our eyes. He reminded us how unsafe our neighborhoods are. He showed us that it is our business and responsibility to know what is going on next door. It is our right to be concerned about an unfenced pool in a neighborhood full of children. We underestimated the power and attraction a swimming pool carries with it. Until it took our baby. We learned that no neighborhood is safe when we have these very attractive, yet deadly weapons lying in our own backyards. Just silently waiting to be found. Beckoning to the small eyes that come across it.

It is very easy to pass off the stories you hear on the news as "bad parenting". It is easy because we all know it would never happen to us. We have our eyes on our kids 24 hours a day. It is easy because you know better. You would never put your kids in harms way. We are no different than you. We gave everything and then some to our kids. Our boys are our lives. We would give our lives for theirs in an instant. I never took my kids to any home that had an unfenced pool in it. I never let my kids go swimming with anyone that did not know how to. We are very protective parents. We did not mess around when it came to water. Our boys are not allowed to bathe alone.

Bathroom doors were always closed when they were little. It still happened to us. It still happened and we do not have a pool. It took 30 seconds for our world to shatter. The time it takes you to bend down and tie a shoe. It does happen that quickly and that silently.

A fence around every pool in the State of Arizona will decrease the number of deaths that do occur every year. Just as car seats did. I cannot say it will stop them 100%, but isn't a decrease worth it? Nothing we do will bring our son back. We could not save him. But through our experience, we can help save yours. For all of the little ones in this State, they are worth it. They are worth the fight.

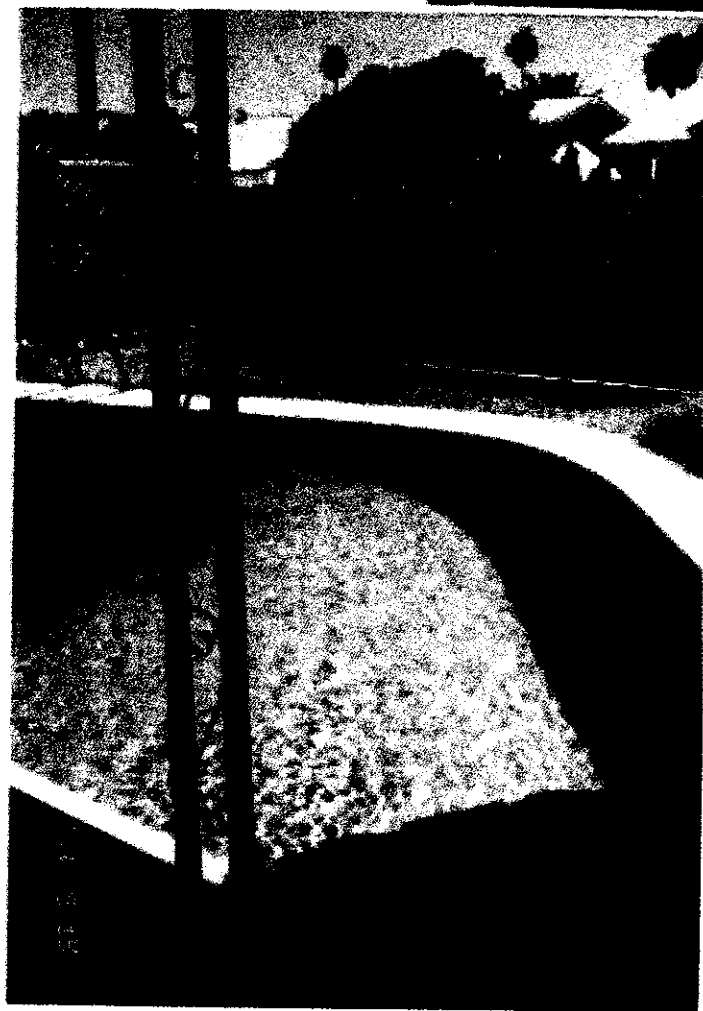
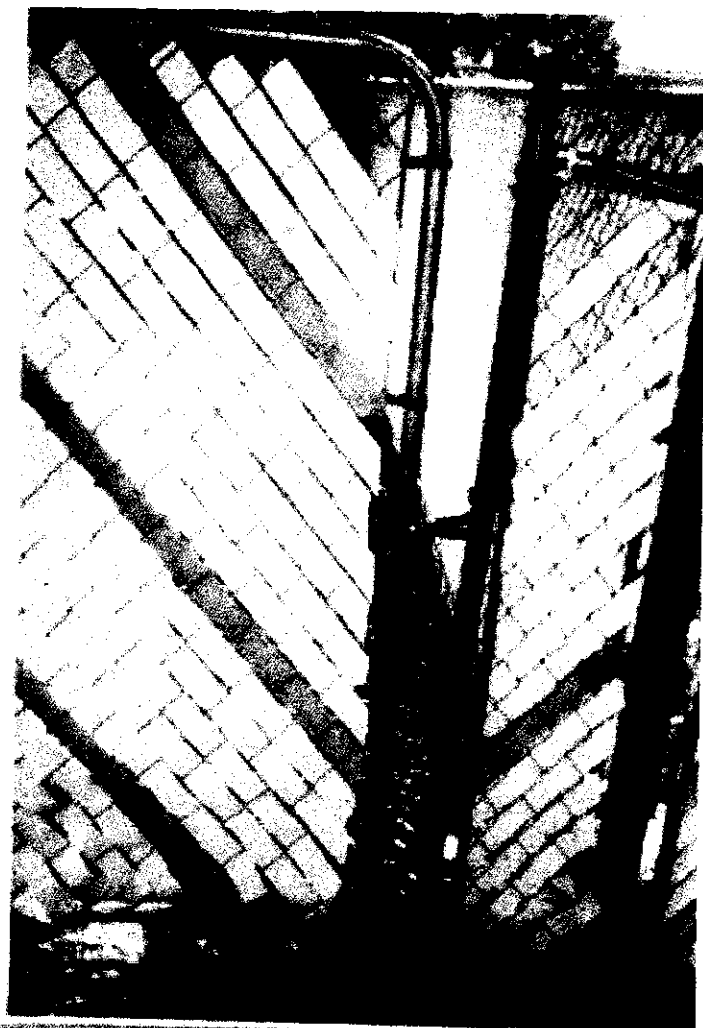
Please email your State Legislatures and City Council Members letting them know that you support such a law. Together we can make a change. A needed change to save our kids. Please feel free to email me at dianesevey@hotmail.com

My family and I are making hundrends of these copies to give to local companies that support us. We have also made ribbons of our own to give out. Wanted to let everyone know what we were doing over here. Thank you all

Diane Sevey

Please see the attached pictures of a home. A home in Mesa that is grandfathered out of all laws. I walked right into this backyard. As you look at the fence, a one year old could get into it. The pool is not fenced and is a diving pool. The fence surrounding the property is also very cheap and is see through. The Police Department stated that nothing could be done until we see a child go back there. HHHmmmmmm.....

On the road to retirement? Check out MSN Life Events for advice on how to get there! <http://lifeevents.msn.com/category.aspx?cid=Retirement>





RECREATION SAFETY INSTITUTE

A Membership of Experts on Safety

P.O. BOX 392 -- RONKONKOMA, NEW YORK 11779 -- (516) 883-6399 - FAX (516) 883-1814

*Pool Safety
Committee
16*

Ms. Rockelle Hammond
Office of Secretary
US Consumer Products Safety Commission
Washington, DC 20207

To Whom It May Concern:

I wish to thank the Commission Members for calling the Public Field Hearing on Swimming Pool Safety. As an Aquatics Litigation Expert, Executive Director of the non profit RECREATION SAFETY INSTITUTE, Ltd. and its Aquatic Safety Services, Chair of the NATIONAL SAFETY COUNCILS Community Safety Division, and Chair of the NATIONAL AQUATIC COALITION Inc, these respective groups are supportive of your efforts to focus on the issues noted. We endorse the Commission's efforts and stand ready to assist in the implementation.

Unfortunately, a list minute Deposition Request has changed my plans for attending. I have enclosed several of close to 50 articles published on Pool Safety as well as service to WHO European Centre for Environment and Health project as attached.

Perhaps CPSC could expand beyond the hearing and form a Pool Safety Committee as it had ten to fifteen years ago. I and our organizations would be pleased to assist.

Thank you for your attention and consideration.

Very truly yours,

Dr. Arthur H. Mittelstaedt, Jr., Ed.D
Executive Director



EUROPEAN CENTRE FOR ENVIRONMENT AND HEALTH

WHO Expert Consultation on the Development
of Guidelines for Safe Recreational-water Environments:
Volumes 3: Health Risks from Swimming Pools,
Spas and other Similar Recreational-water
Environments; Volume 5: Monitoring and Assessment
of Swimming Pools, Spas and other Similar
Recreational-water Environments
Ann Arbor, Michigan, USA, 20 - 22 January 1997

ICP HCE 039 VD 96 I
EHPM 07 01 04
18 December 1996

SCOPE AND PURPOSE

The water environment is used extensively for recreational purposes by both resident and tourist populations world-wide. Research has indicated that this has an impact upon health and WHO is often requested to provide guidance in this area

A number of health risks associated specifically with swimming pools, spas and similar recreational/ therapeutic water environments have been long-recognized and include for example those relating to physical hazards and accidents and those relating to water quality. Nevertheless new hazards continue to be recognized and include for example those associated with newly-recognized pathogens (e.g. *Cryptosporidium*), by-products of water treatment (especially disinfection by-products) and physical hazards associated with aspects of design, construction, operation and maintenance.

In response to the mounting evidence of significant health impact and the increasing attention this is receiving from the public, politicians and scientific community, the World Health Organization has initiated development of *Guidelines for Safe Recreational-water Environments*.

In June 1996 a group of 15 invited experts met in Bad Elster at the Research Department of the Institute for Water, Soil and Air Hygiene, WHO Collaborating Centre for Research on Drinking-water Hygiene, to discuss the development of the Guidelines. The meeting made a series of detailed recommendations regarding the structure and content of the Guidelines and needs for future research. The meeting specifically recommended that the Guidelines be prepared in five volumes including *Volumes 3 and 5: Health Risks from Swimming Pools, Spas and other Similar Recreational-water Environments; and Monitoring and Assessment; and Monitoring and Assessment of Swimming Pools, Spas and other Similar Recreational-water Environments*.

This meeting has been called with a number of inter-related objectives:

- to review the scope of the health impacts associated with recreational and therapeutic use of swimming pools, spas and similar water environments: and the proposed scope of the Guidelines;
- on the basis of the above to assess the draft structure and content of the Guidelines and make detailed recommendations regarding the structure and content of the proposed Volumes 3 and 5 of the Guidelines;
- develop a programme of work for the preparation of these volumes which will ensure that full drafts are available for consideration by a review meeting in May 1997 and finalisation by October 1997; and
- to identify areas in which research is necessary in order that Guidelines may be developed based upon adequate scientific information and in order that standard setting, monitoring and enforcement in relation to design, construction and operation may be based upon sound scientific criteria.

Swimming Pools

Support for the development of WHO *Guidelines for Safe Recreational-water Environments* has been provided by the European Commission, the German Unweldbundesamt, the States of Jersey and the Government of Italy. Associated activities have also been supported by the United Nations Development Programme and ACEA.



EUROPEAN CENTRE FOR ENVIRONMENT AND HEALTH

FACT SHEET

RECREATIONAL WATERS: RISKS AND BENEFITS

General

Many millions of people use water for recreation - it is estimated that there are:

- 100 million visitors to the Mediterranean each year, in addition to the 130 million inhabitants
- 40 million visitors to the Black Sea coast during summer months
- There are considerable positive health effects upon users of recreational water as well as negative ones.
- Research has tended to focus on adverse health effects of water contaminated with sewage.
- Spinal injuries, drowning and near drowning arising from accidents are severe health outcomes of great concern to public health.
- Human behaviour - especially alcohol consumption - is a prime factor that increases the likelihood of accidents.

Drowning

Available data suggests that males are more likely to drown than females (Global Health Statistics, 1990). In 1995 in the USA drowning rates for every age group were almost 4 times greater for males than for females (CDC, 1999).

Deaths through drowning - standardised rates (Health for All, 1993): (examples)

Italy (1993) 0.09 per 10,000 persons

UK (1993) 0.04 per 10,000 persons

Latvia (1993) 1.47 per 10,000 persons

France (1993) 0.11 per 10,000 persons

Where do drownings occur most often?

Private pools, lakes and other freshwater bodies contribute significantly to drowning statistics, especially in children - in Denmark for example 63% of all child drownings occurred in these types of water bodies between 1989 and 1993. In the same study it was reported that between one third and one half of all adult drownings were related to alcohol intake (Steensberg, 1997). Alcohol use is involved in 50% of...

Data from the UK (RoSPA, 1996): drowning by location - rivers and streams 32%, docks and harbours 3%, lakes and reservoirs 16%, swimming pools 2%, garden ponds, 2%, home baths 9%, coastal 28%, canals 7%, other 1%.

In the USA most drowning occur in swimming pools. The US Consumer Product Safety Commission report 500 drownings and 3000 near drowning in residential swimming pools among children under 5 years old. 60-90% of drownings among children aged 0-4 occur in residential pools and more than half occur in pools in their own home.

Drowning in the second leading cause of injury related death for children (1-19 years) accounting for 1,502 deaths in the USA in 1995. For children aged 0-4 it is the second leading cause of death.

Spinal injury

Compression factors of the spinal column have caused complete paralysis, through to quadriplegia and paraplegia. These injuries and sometimes fatalities result from diving, sliding or falling into water bodies.

It has been estimated in the USA that approximately 350 spinal cord injuries involving natural water bodies occur annually. Of the cases studied 90% result in quadriplegia. Diving into a wave at a beach and hitting the bottom was the most common cause.

INCIDENCES OF QUADRIPLÉGIA ASSOCIATED WITH DROWNING ACCIDENTS
(GLOBAL HEALTH STATISTICS, 1990)

REGION	PREVALENCE RATE PER 100 000	INCIDENCE RATE PER 100,000
Latin America and the Caribbean	13.4	0.5
Middle Eastern Crescent	10.7	0.5
China	35.8	1.1
Other Asia and Islands	27.5	1.0
Sub Saharan Africa	28.3	1.5
India	19.7	0.8
Established market economies	3.9	0.1
Formerly Socialist economies of Europe	15.7	0.6
World	21.0	0.8

Water borne disease outbreaks associated with recreational water

Main disease concern is gastrointestinal illnesses that have been shown to be associated with indicator bacteria concentrations in the water. Also of concern are acute respiratory infections. Most research has not addressed severe health outcomes but transmission of infectious hepatitis and of poliomyelitis is biologically plausible.

It is difficult to estimate the number of people suffering gastrointestinal illnesses and other infections from swimming in recreational waters. Estimates vary but it has been suggested that microbiological contamination of bathing waters, primarily in the Mediterranean, is responsible for over two million cases of gastrointestinal diseases annually (EEA, 1995).

Saliba and Helmer (1990) concluded that between 25, 000 and 40,000 people are affected by gastrointestinal symptoms and micro-organism contamination per million population. Higher estimates are made by some tourist authorities that suggest that around 40% of tourists in the Mediterranean beach resorts become ill (although this may also include consumption of contaminated food or unsafe drinking water).

Between 1995 and 1996 37 outbreaks of waterborne diseases were recorded in 17 states in the USA attributed to recreational waters. An estimated 9,129 persons, including 8,449 persons were affected in two large outbreaks of cryptosporidiosis.

- 59.5% of these outbreaks were gastroenteritis
- 24.3% were outbreaks of dermatitis
- 16.2% were single cases of primary amoebic meningoencephalitis
- Of the outbreaks of gastroenteritis 59.1% were associated with lake water, 36.4% with swimming or wading pools and 4.5% with a hot spring.
- Of the nine recorded outbreaks of dermatitis 77.8% were outbreaks of *Pseudomonas* dermatitis associated with hot tubs (CDC, 1999).
- There is some evidence to suggest a dose-response relationship between bacteria counts and symptoms however it is the type of pathogen in the water that determines the severity of the illness.

Control

Control relates primarily to treatment of sewage. Management of sewage discharges includes:

- Control of direct discharges onto the beach or equivalent
- Short or long sea outfalls - processes of dispersion, dilution, sedimentation and inactivation following discharge should be considered.
- Holding sewage in storage and discharge during periods of no bather activity.

Cyanobacteria

Allergic or irritative dermal reactions of varying severity are known from cyanobacteria (organisms with some characteristics of bacteria and some of algae). Symptoms may be more severe in users of diving suits where algal material is accumulated.

Documented evidence of significant health impairment shows that toxicity is expected in about 75% of all samples containing cyanobacteria. Symptoms include severe dermatitis, abdominal pain, nausea, vomiting, sore throat, dry cough, headache, blistering of the mouth, dizziness, liver damage, tumour growth, and paralysis depending on the species of cyanobacteria.

Total numbers of persons affected have not been estimated but individual cases include:

- 1989 - 10 soldiers affected in England after swimming and canoe training in water with heavy blooms of *Microcystis* spp. Two soldiers developed severe pneumonia.
- 1995 - Australia - epidemiological evidence of adverse health effects after recreational water contact. The study involving 852 participants showed increased incidence of diarrhoea, vomiting, flu symptoms, skin rashes, mouth ulcers, fevers, eye irritation within 2-7 days of exposure. (Pilotto et al., 1997) Symptoms increased with duration of water contact and density of cyanobacterial cells.

Pools without recirculation

Present special problems - have recently been found to be the source of waterborne enteric outbreaks. Causative agents involved in most of the outbreaks are *Shigella*, but also leptospira, Hepatitis A virus and rotavirus have been identified. Data on number of outbreaks is not widely available. Between 1975 and 1996, 46 epidemiologically confirmed outbreaks connected to bathing pools were recorded in Hungary with a total number of 6300 cases.

A pool safety checklist

By Arthur H. Mittelstaedt Jr., Ed.D.

Today, the knowledge available relative to the construction and operations of pools has increased tremendously. Safety, sanitation, supervision, filtration, circulation, construction, and numerous other concerns must be addressed because of changes in codes, standards, criteria and guidelines.

Check your pool for signs of conditions and situations that can affect its liability and longevity, and correct the problems.

Safety

Following are examples of solutions to problems that should be complied with.

Non-slip decks installed; water depths marked; water depths adequately complied with; obstructions marked; guard rails on high board; nets or screen around high board side and rail; equipment grounded; dangerous equipment removed (slides, lights); nosings of steps marked; breakpoint marked; lifeline placed; lifeguard position identified; lifesaving equipment (life rings, shepherd's crook, spine board) installed; first aid kit placed; ground fault breakers installed; pool electrical checked; non-slip handrails installed in ladder; unauthorized lighting removed; and GFI breakers on all pool-side receptacles installed.

Construction

Following are examples of problems.

a. **Pool shell:** Cracks in walls; cracks in floor; spalling of concrete; settling of decks or pools; expansion joints opened; rust stains around fittings.

b. **Deck equipment:** Rigid bolts not secure; rust apparent; treads not non-skid; diving boards not non-slip or protective sides and bottom; sharp edges in equipment; all electrical equipment not grounded per NEC.

c. **Gutter system:** Overflow to waste or filter not labeled; leaks in gutter or piping; cracks in equipment; loose plates tripping hazard; open apparatus entrapment of limbs.

d. **Recirculation system:** Filter does not clean water quickly (overnight); leaks in piping; corrosion in strainer; waste discharged to sanitary sewer; excessive maintenance; valve leaks; replacement parts not available; filter system undersized; hydraulic system undersized.

e. **Chlorine system:** Corrosion evident; safety bars not on window or steel door; ventilation not from floor level; fan switch outside; ventilation discharge to inhabited area; yearly renovation performed; operation instructions not posted; gas mask not outside of room; leak test not satisfactory; eye wash and shower not available.

f. **Bathhouse:** Not adequate for programs; corrosion and deterioration around door frames; high humidity (indoor); settled decks; puddles on floor; inadequate parking; athletic qualities.

Modernization of the pool will be necessary to bring such pool up to date. The modernization must include the following in accumulative order of priority.

1. **Change diving boards --** The size, length, height, type and performance of the boards must be checked with relation to the diving zone of the pool to insure safety.

2. **Mark safety hazards (plus number) --** The edge of steps, break point of the bottom and other hazardous areas must be marked to create an awareness of contour changes.

3. **Remove obstructions --** Steps, inlet pipes and other hazards must be removed to reduce injury.

4. **Place warning signs --** The hazardous and dangerous conditions or situations must be identified and prohibited to prevent accidents.

5. **Re-install mechanical equipment--** The filters, pumps and inlets, and motors must be changed to accommodate new turnover rates and sanitary requirements.

6. **Reconstruct shell inside of old pool --** the pool shape and contour should be changed by reconstructing a new pool shell within the old pool allowing for improved, skimmed systems and diving activities.

In most instances, the pool structure that is stable with a stable deck and level-skimming system can be updated easily with proper design and engineering.**

Dr. Arthur H. Mittelstaedt Jr. is vice chairman of Ward Associates, P.C. landscape architects, architects and engineers in Bohemia, N. Y.



Safety Deficiencies in Pools and Beaches Can Be Abated By Warnings

By Dr. Arthur H. Mittelstaedt, Jr., Ed.D.

Though few government legislatively passed legal building codes require WARNINGS for vulnerable buildings and site areas, technical standards for WARNINGS have been established and recognized for many years by the courts. The American National Standards Institute promulgated the first standard which has expanded to four, each for a specific area of industry. As a result, many different technical specifications literature and marketing materials recite or comply with such standards.

WARNINGS and failure to warn, an increasing theory of negligence is accepted in most legal systems. If the "failure to warn" doctrine or theory is relevant in a injury or fatality incident, settlements and judgements quickly result. Though it might seem that a proliferation of signs, labels, markings, signboards and rules are cluttering the pool environment, this clutter also seems to generate the thought that, "no-one will read the signs or markings anyway." However, warnings are an attempt to influence the behavior of the user or consumer. Such WARN-

ING signage usually include the alert, i.e., DANGER, WARNING, or CAUTION, the prohibition - NO SWIMMING, the hazard, i.e., ROCKS, STRONG CURRENT etc., the injury or fatality that could result, i.e., BROKEN NECK, DROWNING etc.

So if the public doesn't read the stuff anyway, why put it up? Well, the court decisions are changing this thought. The standard of practice is moving to the direction of implementing the courts decisions that are being reached- WARN, as well as INSTRUCT, can reduce liability. The following types of warnings now exist for beaches and pools.

SIGNS

Sign manufactures are now producing signs for installation in water environments. One manufacturer is Quality Industries, who is producing a system of signs for aquatic facilities similar to the series available for playgrounds. A signage system of pictographs and messages in a standard box with a red circle and slash for permission. In addition to this standard symbol, which is also

available as a decal, is the complete sign. This sign would carry either of the three universal signs- Danger, Warning or Caution- in their appropriate graphic and color formation. The sign would also convey the message, black on white, of the conditions or reason for the prohibition of "no" such as shallow water, murky water, etc. The sign would also contain the message in english or other prominent language of the area such as "No Diving" and "No Jumping". The final element of the sign could be the consequence of im-

proper action such as a fatal or serious neck injury or other result. It is incumbent upon every aquatic professional to provide the proper WARNINGS.

LABELS

Several manufacturers are now producing labels for everything from helmets to tri-cycles. Such labels describe the limits of use, prohibition of use, and proper use of the items among precautions that must be taken. Such labels are backed up by package instructions and precautions. In the pool and spa industry, labels are used on starting blocks, diving boards, slides, lifeguard stands and many other pieces of equipment as well as water devices. NO DIVING symbols in the form of decals for use on the coping around the pool are also available along with the depth.

MARKINGS

Several pool manufactures, designers or contractors are now integrating into the basic construction a variety of markings to enhance safety in attention to targets, racing lane center lines, and depth numerals (which should be in feet as well as meter). These markings include a line down the center of the pool and across the pool to depict the curvature of the pool bottom, at the edge of steps or seats to depict the edge, and where the pool bottom and slope breaks in its gradient.

SIGNBOARDS

All pool operators and beach managers, as well as designers and builders, must locate and incorporate posting of rules for the use of the facility that patrons must comply with relative to insuring their safety.

INSTRUCTIONS and failure to instruct- another increasing theory of negligence accepted in the courts is the failure to instruct. To date, the operator, coach, lifeguard, instructor and others providing services to the public, must verbally and dramatically instruct as to what can be performed or not performed. The participant or spectator must be totally informed and aware of the risks and precautions to take to minimize the risks. Possible bilingual instructions may be necessary.

It is incumbent upon all responsible persons to attend to these common theories of negligence to prevent accidents, reduce exposure and avoid liabilities. ♦

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Diving Injuries in Natural Waters: An Unsuspecting Danger

By Dr. Arthur Mittelstaedt, Jr., Ed.D.

Studies have provided data upon which judgements may be made relative to some of the underlying causes of injuries which happened in bodies of water located in the natural environment. They include both man-made and natural water areas. An examination of the problem from the standpoint of the owners and operators of water areas (lakes, ponds, quarries, canals, rivers, ocean and ocean embayments), the users (patrons) of these areas, and the regulatory agencies (federal, state, and local) provides insight to some of the causative factors of diving injuries.

A study of diving injuries was conducted by Dr. Milton Gabrielson, professor emeritus of New York University and assistant to the president of Nova University. He analyzed the diving cases in natural waters which were sorted out from over 400 cases and are included in this study. The 135 incidents examined were derived through the process of recording actual litigation. It was not a sample of a universal or statistical

study. The study was of cases made available to the investigators. The study identified and discussed the following factors related to each injury or fatality which the litigation focused:

- characteristics of the injured person
- facility where the accident occurred
- environmental factors
- events leading up to and immediately following the accident
- supervision and safety measures
- rescue procedures and first aid used

The study purports to identify who the victims are, where the accidents occurred, and the causative factors and circumstances surrounding the accidents.

The results of this study provided essen-

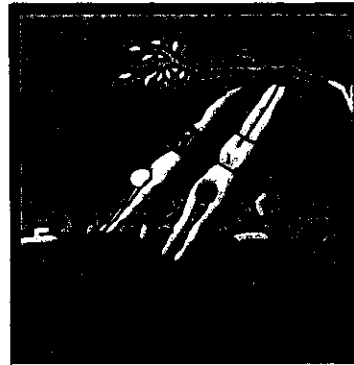
tial information to those responsible for managing or operating the types of facilities or areas where these accidents occurred. It also gives readers a greater understanding of the problem, and hopefully encour-

ages those responsible to take the actions necessary to reduce, if not eliminate, some of these catastrophic injuries.

The study and resultant report summarizes conclusions relative to the victim and its characteristics and the facility and its characteristics. The conclusions also addressed how the water areas and facilities are

managed and operated. The report, authored by Dr. Gabrielson and co-authored by myself, Shulman and Spivey identified the following:

Shallow water, turbid water conditions,



lack of information and warnings, diver misjudgment, lack of lifeguards in designated areas, lack of risk analysis, failure to remove trees and branches, lack of public education, misplaced structures and running from beaches – all of these factors should be reviewed by every owner, operator, and user of waterfront areas. Paramount concerns are the poor condition and depth of the water by the inexperienced diver, the non-warning by owner and unsupervised shorelines.

The report focused on an array of deficiencies in the design, operation and use of aquatic facilities. These deficiencies included failure of owners and operators to survey the site and establish policies and procedures; failure of patrons to act safely, to obey signs and rules, become familiar with water, train, practice safe dives and use correct judgement about horseplay, substance abuse and other conditions; failure of commercial builders and contractors to warn, fence hazards, recognize attraction of water; failure of vacation homeowners to inform any guest, post signs and prevent or prohibit improper use; failure of organizers of events to plan in advance, visit site beforehand, to assess risks and act with precaution and caution; and the failure to educate the public to acquire aquatic knowledge and skills, and practice safety.

The report projected recommendations that can reduce many catastrophic injuries. It emphasized the need for public education, professional waterfront standards, and technical boating and swimming dock standards.

The author and co-authors reflected the plea from victims for communication. It makes a case for further elaboration of several critical points raised in the report. First, the role of the property owner, and second, that the role of the property user must be expanded on. Both parties have a responsibility in eliminating the unsuspecting danger in natural waters.

The property owner, be they a homeowner, resort owner, or park owner, all have access to insurers. There are virtually no properties that are bare of insurance in the country. Financial institutions, contractual obligations, and in some cases legal agreements, require insurance to protect the investments of money, equipment, materials, personnel, etc. Therefore, the property has a responsibility to obtain a high level of knowledge about safety measures that can protect themselves. The property owner must be told by the insurers what the measures are as related to the planned, designed, constructed, supervised, or designated use of their property for aquatics. This is also

true as related to the non-planned, designed, constructed, supervised, but utilized and noted, thus designated, use of their property.

The responsibilities of both are, in essence, the same. In the latter, the mere notice and acknowledgment of prior occurrence, and particularly a history of use without attempts to prohibit such use, makes it designated by occurrence and common knowledge that is a great "swimming hole". The key is the safety measure to prohibit and disallow use or occurrence that makes it become a non-designated swimming area. Signs, patrols, key barriers and fences are some of the deterrents to use. It is accepted that to initiate such efforts along all of the shorelines is an impossibility. However, when it is known that aquatic use takes place, that designates that the area must be addressed – whether it be a farm stream, a subdivision pond or a bay shore. Attention must be paid by insurers to assist their insureds to understand that water has unsuspecting hazards and dangers, and when designated by common or practiced use or by programmed use, follow all safety precautions.

In turn, the property owner has a responsibility to ask if not told. Anyone with the knowledge and financial resources to own property must be able to apply that same knowledge and resource to acquire the correct information on the use or misuse of their property and the consequences. There are many agencies that a landowner or homeowner can turn to so that they may find out how to disallow unwanted use of their natural waters, as well as how to allow wanted uses. Agencies from the United States Soil Conservation Service to the local library have such information. The excuse of "we didn't know" is impossible and impractical in this era of information technology.

In concert with this responsibility

is the growing codelegation of this responsibility to the intermediate, when such land or property changes hands. Today, the broker and the mortgagor are both responsible to the buyer for not informing them of toxic, as well as other hazards. The concept of requiring termite inspections has now advanced to many concerns. "Buyer beware" is not past. Real estate, banks, and other intermediaries are not shouldering the liability.

The property user, be they family member, a neighbor, or a paid or nonpaying invitee, all have access to national safety and national water safety associations, as well as similar state and local organizations, state and local educational institutions, and the media. They all must do more, but the user must also become aware. The special interest user, such as the swimmer, canoeist, hiker, boater, and bird watcher also must be aware of the publications and other information on water safety and swimming and diving hazards. They must not take the water for granted.

Natural water areas are different than man-made and have many dangers and hazards that are unsuspecting to all. The property owner must be diligent, but so must the property user.



TOO MANY BROKEN NECKS FROM DIVING

By Dr. Arthur H. Middelstaedt Jr., Ed.

The number of people who have sustained an injury to their spinal cord by diving into swimming pools and other bodies of water is frightening. The U.S. Consumer Product Safety Commission Title (CPSC) has indicated that approximately 700 spinal cord diving injuries are estimated to occur in the U.S. annually as a result of recreational diving into residential pools, public pools, and other bodies of water. It has been further estimated that there are 150,000-175,000 people presently living in the U.S. who have suffered traumatic spinal cord injury and that diving may account for 9-10 percent of them.

A book entitled *Diving Injuries: Research Findings and Recommendations for Reducing Catastrophic Injuries* is about to be published by CRC Press in Boca Raton, Florida. This book represents, without a doubt, the most comprehensive study of the causes of diving injuries that has ever been conducted. It contains a detailed analysis of 440 spinal cord injuries which occurred in swimming pools and another 161 injuries which resulted from dives into our lakes, rivers, ocean and other natural bodies of water. The collection of data for the 601 injuries spanned a period of 26 years. Every accident site was visited and data recorded, compiled and computerized. The cost of collecting the data exceeded \$1.5 million. The book not only identified where the injuries occurred, but also detailed descriptions of the victims and the circumstances associated with each injury. The 440 pool-related accidents were divided into the following categories:

- 211 injuries from dives into the shallow portion of in-ground swimming pools
- 92 injuries resulting from dives from springboard and jumpboards
- 105 injuries occurring in above-ground pools with a depth of 3-1/2 feet
- 32 injuries resulting from dives from starting blocks

Table 1 indicates the ownership of the pools.

Table 1: Pool Ownership

<u>Owner</u>	<u>Number</u>
Residential	228
Hotel/Motel	72
Apartment/Condominium	65
Municipality (City/County)	25
High School/College	24
Voluntary Agency	11
Commercial	7
Private Country Club	5
Others	3
TOTAL	440

The University of Alabama Spinal Cord Injury Care System published the book *Spinal Cord Injury: The Facts and Figures*. It states that more spinal cord injuries result from people diving into pools and other bodies of water (lakes, rivers, oceans) than all other sports combine, as shown in Table 2.

Table 2: Distribution of Sports-Related Accidents

<u>Activity</u>	<u>Percent</u>
Diving	66.0
Football	6.1
Snow Skiing	3.8

Surfing	3.1
Trampoline	2.6
Other Winter Sports	2.3
Wrestling	2.3
Gymnastics	2.2
Horseback Riding	2.0
Other	9.8

Here are the facts relative to the 440 pool-related diving accident revealed in the book on diving injuries:

- 365 (82.8%) occurred in residential, hotel/motel, and apartment/condominium pools as indicated in Table 1.
- Only two percent (2%) of the 365 pools had lifeguards on duty at the pool at the time of the accident.
- 92 (20.8%) were injured when diving from springboards or jumpboards, and all struck the upslope of the pool's bottom, the transition from the deepest point to the shallow portion of the pool.
- The water depth in the pools where 337 of the victims struck the bottom was 4 feet or less, with 292 striking the bottom in 3 ft. 6 in. of water or less.

(cont. on page 42...)



(...Broken Necks, cont. from page 33)

- Of the injuries resulting from dives off of starting blocks that were 30 inches above the water surface, all occurred in water depth of 4 feet or less, with most in 3 ft. 6 in.
- In 48.9 percent of the pools there were no rules posted anywhere around the pool which would identify proper use of the pool to pool patrons, which was most disturbing.
- Signs prohibiting diving from any place in the pool were present in only 43 of the 440 accident sites.
- The consumption of various alcoholic beverages involved 40.7% of the victims who, by their own admission, had a drink or two during the six-hour period prior to sustaining their injury, most claiming they had been drinking beer.
- Seven of the victims admitted to having used any drugs during a similar period.
- 74.32% of the victims were rescued and removed from the pool by friends who failed to use a spineboard in removing the victim from the water and only a few of the pools had a spineboard in the pool area.
- The predominant injury levels to the spine were at the C5, C5-6, and C6 vertebrae.
- 31.1% of the injuries occurred where the level of lighting of the pool was below the recommended standards.
- Only a few of the victims had ever received, at any time in their life, any instruction in diving from a qualified instructor.
- The mean age of the male victims was 23.8 and females 20.9.

Interviews with the victims revealed the following:

- They never thought they could break their neck by diving where they did
- No one told them verbally not to dive
- They claimed that if they had seen a sign prohibiting diving they would not have made the dive
- A surprising number indicated that their hands struck the bottom of the

pool first and slipped

- The accident occurred on most of the victims' first visit to the pool and on their first dive into the pool

Finally, it was a surprise to learn that many of the victims had only a bump on the head with only a slight abrasion or laceration. From this it was concluded that it does not take much force on the head to cause damage to the spine.

An analysis of the mechanics of diving contained in this book indicated that a person entering the water from a dive off the deck of a pool, at an angle of 45 degrees or more, will make contact with the bottom of the pool in water depths of 3 to 4 feet in three to four tenths of a second. To make a safe dive, the book states that the entry angle must not exceed 20 to 25 degrees with the arms and hands in front and head between the arms.

It was the conclusion of the authors of the book and the Editorial Board that the low level of public appreciation of the risks associated with diving into shallow water greatly increases the responsibility of every person and enterprise engaged in aquatics to practice and promote accident prevention and safety engineering. Until the public is educated, the awareness of the individual concerning diving will remain at the same level as now exists. In this context, it is lamentable that the public will unwisely continue to conclude that the injured diver "was just fooling around."

Generally, an individual is not able to properly recognize the hazards, evaluate the risks, or appreciate the danger involved in diving. This conclusion should sound an ominous chord to all those within the swimming

pool industry, sports and recreation personnel, owners of pools, and regulatory bodies. It is unconscionable for them to have the access and the means to know better and to do nothing.

The authors and Editorial Board believe in the principle that any death or serious injury is unreasonable and unacceptable when reasonable accident prevention means can be used to either prevent death or minimize injury. The test of reasonableness is merely to ascertain whether or not it is technologically and economically feasible to employ accident prevention techniques. Clearly, warning sign and supervision pass that test.

The authors associated with this book have used the tools of many professions to examine the data and causes of these paralyzing injuries produced by diving. They hope it will have an impact on those in positions of responsibility so that the number of these catastrophic injuries may be significantly reduced.

Anyone associated with the teaching of swimming and diving, and all those who design, build, own and operate pools, should read this book and be aware of the catastrophic results of diving. *

*Pool safety
comment*

17

Stevenson, Todd A.

From: Cathy J. Flynt [cflynt@cox.net]
Sent: Wednesday, July 21, 2004 5:47 AM
To: Stevenson, Todd A.
Subject: pool hearing

My name is Cathleen Flynt I am a mother of four 3 boys 1 girl ages 13 to 3 homeowner with backyard pool(fenced) last sunday July 11 2004 an 18 month old girl drowned in a above ground backyard inflateable ring pool her name is Lexi Olive she was a close family friend and played often with my daughter they have no idea how she was able to get in the pool on her own the ladder was removed when unoccupied as stated to done on warning label how many other children have also found access to swimming pools like this one on the box you are given false security and a promise summer time fun and sun I will be attending the july 27 public field hearing hopefully her parents will find the strength to also we all are responsible for the safety and wellness of every child everywhere. thank you Cathleen Flynt 623-594-9122 I would like to help make a difference Lexi was an incredible beautiful little girl who touched my life

7/21/2004

*Swimming pool
comment*

18

Hammond, Rocky

From: Tinsworth, Deborah K.
Sent: Thursday, July 22, 2004 9:24 AM
To: Hammond, Rocky
Subject: FW: Drowning prevention

Here it is

*Deborah Kale Tinsworth
Children's Hazard Program Coordinator
Directorate for Epidemiology, Room 601A
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814*

*phone: 301-504-7307
fax: 301-504-0081
email: dtinsworth@cpsc.gov*

These comments are those of the CPSC staff. They have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

-----Original Message-----

From: Julie Spelman [mailto:waterwonders@swfla.rr.com]
Sent: Wednesday, July 21, 2004 7:54 AM
To: Hammond, Rocky
Cc: Tinsworth, Deborah K.
Subject: Drowning prevention

I am enclosing a letter to Mr. Hal Stratton regarding your request for information regarding drowning prevention. Although I was in attendance in Tampa, I felt it important to offer my written information and point of view. I have been teaching children and adults water safety and swimming skills for 25 + years and believe that I have some information to offer regarding dissemination of safety education. Thank you for your work in this most critical area.

Julie M. Spelman
Innovative Aquatics, Inc.
239.770.0641
waterwonders@swfla.rr.com

7/22/2004

Julie McCaffrey-Spelman
Innovative Aquatics, Inc.
1923 SE 10th Place
Cape Coral, FL 33990

Hal Straton, Chairman
U.S. Consumer Product Safety Commission
Washington, DC 20207

July 20, 2004

Dear Mr. Straton,

I was honored to receive your invitation to contribute to the information being collected regarding drowning and entrapment. I was able to attend the public hearing in Tampa, although I did not testify. I was also in attendance during the closed door discussions after the hearings.

I feel compelled to offer my view in writing to you for the record even though I was able to give my perspective during the afternoon meeting with Debbie Tinsworth and the other attendees to that meeting.

Throughout both phases of the hearing, I formed an overall impression of the presentations. During the panel testimonies, there was some defensiveness, some anger, a certain amount of accusation and some attempts at presenting an individual solution as "The singular most effective solution" to be adopted by the committee.

From the aspect of public health and the issue of drowning, the underlying theme was obviously prevention but each presenter had a very different opinion regarding the weight of each component of that prevention. For example, some leaned heavily in favor of barriers, requiring them through legislation, enforcing their use, and making someone responsible if they are not used. Other speakers were strong advocates of parental supervision, etc.

The secondary theme was determining the future course of action, who was to implement what action and how and, finally, how to fund that action. The parents and families, naturally, wanted action NOW.

During the closed door discussion, I felt there was quite a lot of open and direct discussion which I think was very productive.

I believe that discussions of drowning prevention can be summarized into 5 basic topics:

Barriers

Supervision

Accurate information collection

Regulation

Education

My input would be:

1. Define your terms.

I am an educator and as such I have listened over the years to people referring to “education” regarding drowning and each member of the discussion referring to something different. For example, some are referring to swimming lessons; some refer to pool safety education. I think education is under-represented in the drowning prevention discussion possibly due to the American Academy of Pediatrics press release stating that no child should be taught to swim until the age of 4 even though the policy statement clarifies that statement saying that swimming lessons with safety components such as those taught by the American Red Cross are valid. I have heard people (even pediatricians) state the erroneous idea that children do not learn enough and that they and their parents become overconfident with “swimming lessons”. I believe that until the term “education” is defined clearly and understood equally, “education” will not get its due attention in the discussion of solutions.

Drowning Prevention Education must include teaching very young children (under 1 yr) and their caregivers how to modify their behavior in and around pools, and this training must continue regularly throughout their early years. This, in combination with increased swimming skills over time is the type of education which will help prevent drowning in young children.

2. CPSC can treat pools & spas as it has any other “dangerous” product in the past.

We have known the answers, and the objections. We have in the last 2 generations seen huge strides in safety and the use of safety equipment. As examples seat belts, bike helmets, outlet covers, entrapment proof cribs, topple proof baby walkers, smoke detectors, car seats. The CPSC can inform consumers about what they are buying.

3. Early education not related to pool purchase.

The underlying theme from the parents was had they known the dangers, they would have done something. I propose tell them the dangers and the solutions at a time when they are willing even anxious to hear it. Foster/adoptive parents in Florida must take water safety classes before the process can be completed; why not teach birth parents as well. Every newborn child in the U.S. must leave the hospital by being placed in an approved car seat, properly installed, by hospital personnel. Drowning prevention information can be disseminated to parents to-be by pre-natal educators.

4. PSA's

Penny Taylor Miller, a parent who lost her daughter to drowning, was extremely eloquent and passionate on the subject.

I would add to her suggestion. Produce PSA's which reach children and show them during times and programming when children and their caregivers are watching television. I would (and have) gone one step further to encourage the producers of children's programming to do segments on this #1 killer of our children.

5. Funding

The CPSC is responsible for warning the public about products, which if used according to safe guidelines are safe but can pose a potential threat otherwise. Making swimming pools safe will take the resources of the CPSC to educate consumers. The same way we have taught parents and caregivers how to cover outlets, lock toilet seats and buy cribs carefully, use only flame retardant PJ's, etc. the list of fabulous products with potential for harm is extensive and the CPSC has educated the public with its nationwide campaigns. The resources of The CPSC may not be unlimited, but are far more abundant than any of our local drowning prevention coalitions.

6. Barriers

Although I obviously lean heavily toward education, I completely agree that the Australian model of requiring 4 sided barrier fencing with a self-closing, self-latching gate will effectively eliminate the threat of a child entering a pool unnoticed. The Florida law is a good start and its efficacy will give legislators ammunition to expand the regulation to include retrofitting.

Sincerely

Julie McCaffrey Spelman

Good Housekeeping

250 WEST 55TH STREET, NEW YORK, NY 10019 * 212-649-2000 * FAX 212-649-2490

*Pool
Comment*

July 21, 2004

Hal Stratton
Chairman
U.S. Consumer Product Safety Commission
4330 East West Highway, Suite 724
Bethesda, MD 20814

Dear Mr. Stratton,

Thank you for the invitation to attend the public hearing on pool drownings of children under five years old to be held on July 27, 2004 in Phoenix, Arizona. We do not plan to attend, but please be assured that the Good Housekeeping Institute, one of the nation's foremost product evaluation laboratories, is concerned about the high levels of injury and death that are occurring in swimming pools across the country.

Consequentially, *Good Housekeeping* recently featured a story in our August issue about pool safety, specifically, which pool alarms should be bought and which ones should be avoided. In recent Good Housekeeping Institute tests, we evaluated in-pool alarms for both alarm loudness and motion sensing ability. Of the three brands we tested, only Poolguard's Model PGRM-2 sounded off within 20 seconds each time a child simulator was dropped into a normal-size backyard pool. Another model, Smart Pool's Pool Eye, took longer than 20 seconds to ring and the Pool SOS alarm that we bought was defective, so we cannot recommend either model because they could be unsafe.

We believe that the ASTM Standard 2208-02 improves the overall safety of backyard pools. However, this is only a voluntary standard. In addition to pool alarms, there are other areas covered by voluntary standards, such as, gates, doors, etc. where many different products exist on the market, virtually all with varying levels of performance.

We recommend that the CPSC establish a mandatory standard for pool alarms that will hold manufacturers to the same level of performance. This would assist parents in being able to stop playing roulette with their children's safety.

Thank you for your consideration.

Best regards,



John Kupsch, P.E.
Technical Director
Good Housekeeping Institute

cc: E. Levine, R. Eisenberg, D. Weaver



Post perfect

Stevenson, Todd A.

From: Tinsworth, Deborah K.
Sent: Monday, August 16, 2004 11:05 AM
To: Hammond, Rocky; Stevenson, Todd A.
Cc: Eider, Jacqueline
Subject: FW: Drowning Conference July 27, 2004
Follow Up Flag: Follow up
Flag Status: Flagged

Hi – could we add Mr. Gilbert's response into the file of public comments related to the drowning hearings? Merci beaucoup!

Deb

*Deborah Kale Tinsworth
 Children's Hazard Program Coordinator
 Directorate for Epidemiology, Room 601A
 U.S. Consumer Product Safety Commission
 4330 East West Highway
 Bethesda, MD 20814*

*phone: 301-504-7307
 fax: 301-504-0081
 email: dtinsworth@cpsc.gov*

-----Original Message-----

From: RRGJEDI@aol.com [mailto:RRGJEDI@aol.com]
Sent: Wednesday, August 11, 2004 12:15 PM
To: Tinsworth, Deborah K.
Subject: RE: Drowning Conference July 27, 2004

Deborah Tinsworth, Project Manager
 Directorate for Epidemiology
 U.S. Consumer Product Safety Commission
 Washington, D.C. 20207

RE: Drowning Conference July 27, 2004

Dear Debbie:

I think we've communicated before. I think Jacquie had given me your name sometime back.

As far as how to prevent residential drownings, it seems to me as though, based upon statistical analysis, enacting ordinances like the one in Phoenix, Arizona, has been effective. As I'm sure you know, in Phoenix there was a 50% reduction in drownings following the enactment of the multiple layers of protection ordinance. This reduction has continued and, when I last met with John Herrington, who is Chairman of the Arizona Drowning Prevention Coalition, I believe they were trying to updated statistics based on population growth. There in Phoenix, of course, there has been a heroic effort by the firefighters also to help enforce the ordinance and create better awareness of drowning prevention techniques on the part of homeowners.

8/19/2004

As far as what Consumer Product Safety Commission can do, it would seem to me as though they could become involved in helping to promote and get legislation passed on a statewide basis. I know my friend, Nadina Riggsbee, in California has worked over the last 25 years to help get ordinances and statewide legislation passed in California to help make safer residential pools.

I was not able to attend the meeting in Phoenix, but I would appreciate receiving whatever results or reports are made as a result of the meeting.

Hope you are having a fun but safe summer.

Ronald R. Gilbert
Chairman, Foundation for Aquatic Injury Prevention
Wendy Wawrzyniak
Director of Aquatic Safety
www.aquaticisf.org
800-342-0330

BOARD OF COUNTY COMMISSIONERS

*Pool safety
committee* 21

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P.O. Box 1110
Tampa, Florida 33601
(813) 272-5660
www.hillsboroughcounty.org
Patricia G. Bean
County Administrator
Kathleen Mathews
Internal Performance Auditor

August 10, 2004

Hal Stratton
Chairman
U.S. Consumer Product Safety Commission
Washington, DC 20207

Dear Chairman Stratton:

I submit for your committee's consideration the attached memorandum from Hillsborough County Director of Parks and Recreation. I hope you find this information useful. If you have any questions or comments, please call.

Sincerely,



Jan Platt
Commissioner

Hillsborough County
Office of the County Administrator
Pat Bean

601 E. Kennedy Boulevard, 26th Floor
Tampa, Florida 33602

ADMINISTRATIVE REFERRAL RESPONSE

TO: Commissioner Jan Platt
FROM: Pat Bean, County Administrator
SUBJECT: SWIMMING POOL DROWNINGS

CONSTITUENT:

TASK DESCRIPTION

Referencing the attached information, I would be delighted to submit in writing any thoughts you and your staff have on this issue. Written comments can be submitted until August 27th.

DATE: July 29, 2004
LOG NO: 30391
ACA
OFFICER: Bernardo Garcia
SECONDARY: Stan Motley
DUE DATE: August 27, 2004

REFERRAL COMPLETION STATUS

RESPONSE AS BEEN EMAILED TO COMMISSIONER: Memo dated 7/27 from Motley to Garcia: It is our belief that the best avenue to reduce children drownings is through the education of the parent of how quickly drownings can occur and the implementation of Learn to Swim programs for all ages. Over the years we have seen a reduction of drownings and rescues by lifeguards in our swimming areas. It is believed this reduction is a direct result of the Learn to Swim program that we offer to children on our county playgrounds. Should you have any further questions, please contact Phil Evans at (813) 903-2258.

MEMORANDUM

DATE: July 27, 2004
TO: Bernardo Garcia, Assistant County Administrator
FROM: Stan Motley, Director, Parks, Recreation and Conservation
SUBJECT: Swimming Pool Drownings – Administrative Referral #30391

Commissioner Jan Platt's request for comments concerning swimming pool drownings was referred to the Parks, Recreation and Conservation Department for review and response.

Thank you for the opportunity to comment on the United States Consumer Product Safety Commission study on drownings. We found the supplemental information and background statistic on drownings to be very interesting.

Our three swimming areas are open water beaches. We have been fortunate in recent years to have not had a drowning at our designated swimming areas. Our historical cases of drownings or near drowning incidents have shown the following trends:

1. Drowning or near drowning victims were not being supervised by adults.
2. Drowning or near drowning victims were placed in the care of other young children (i.e. an older sibling).
3. The parent or guardian had been distracted from observing the child.

It is our belief that the best avenue to reduce children drownings is through the education of the parent of how quickly drownings can occur and the implementation of Learn to Swim programs for all ages.

Over the years we have seen a reduction of drownings and rescues by lifeguards in our swimming areas. It is believed this reduction is a direct result of the Learn to Swim program that we offer to children on our county playgrounds.

Should you have any further questions, please contact Phil Evans at (813) 903-2258.

SM/PE/ng

cc: Commissioner Jan Platt
Pat Bean, County Administrator

h:\users\rojas\ar\30391



United States Department of State

Washington, D.C. 20520

August 26, 2004

Office of the Secretary
US Consumer Product Safety Commission
4330 East-West Highway
Bethesda, MD 20814-4408

Dear Chairman Stratton:

Thank you for personally requesting testimony from the US Department of State regarding the prevention of toddler drownings in residential swimming pools. As you are aware by now, the Department has been actively engaged in drowning prevention for many years due to the large numbers of Government employees working overseas at diplomatic posts and residing in housing leased or owned by the US Government. At least 10% of US diplomatic housing has a swimming pool.

Pools overseas pose the same drowning risks to toddlers as they do in the United States. The Department has not been immune to toddler drownings. From 1989 – 1998, the Department experienced 1.2 toddler drownings per year in both residential and community use pools. Since 1999, a toddler has not drowned. This reversal is attributed to the comprehensive swimming pool safety program that was instituted in 1999. We are pleased to share our experience, ideas, strategies and recommendations with the CPSC and the public. Enclosed please find answers to the questions the CPSC posed in the *Federal Register*, a copy of the Department of State's Swimming Pool Safety Standard, a checklist used during mishap investigations, and a copy of our recently released Swimming Pool Safety Brochure.

Should the CPSC have any additional questions or require any clarification regarding this submittal please do not hesitate to contact me by email (levinelb@state.gov) or by phone (703) 875-4137 or fax (703) 516-1958.

Sincerely,

C. Levine /for

Lisa Levine

Enclosure: As stated.

SWIMMING POOL DROWNING MISHAP – DATA SHEET

Upon completion, attach this sheet to the Mishap Data – Generic Form.

Post _____

Mishap Date _____

Ask post to fax/email a drawing and/or digital photos showing: pool area; barrier; gates; location of victim; location of supervising adults; and, any other specifics warranted by mishap circumstances.

Pool type	Residential Use	Community Use	Unknown	
	Main Pool	Wading Pool	Unknown	
Incident type	Near Drowning	Drowning	Diving Mishap	Other _____
Reason for pool use	Recreation	Party (type) _____		Other _____
Victim age	Toddler (< 5 yrs)	Child (5-12)	Teen (13-15)	Adult (>16)
Victim circumstances	Found at:	Bottom of pool	Deep End	Shallow End
	Swimmer	Non-swimmer	Unknown	
	Resuscitated poolside	Resuscitated elsewhere _____		
Who found/retrieved victim?	Lifeguard	DRP	Victim's parent	Sibling
	Friend	Bystander	Local Guard	Other _____
Pool features	Barrier	Yes	No	Unknown
	Self-closing gate(s)	Yes	No	Unknown
	Self-latching gate(s)	Yes	No	Unknown
	Lockable gate(s)	Yes	No	Unknown
	Certified Lifeguard poolside	Yes	No	Unknown
	Designated Responsible Person	Yes	No	Unknown
If diving mishap	Dive depth _____	Diving Board	Deck dive	Unknown
If victim 16 years or younger	Who was caregiver?	Parent	Nanny	Other _____
	Describe location of caregiver at time of mishap:			
If wading pool	Is entry possible from main pool area?	Yes	No	Unknown
	Was caregiver in wading pool area (i.e., within barrier)?	Yes	No	Unknown
Brief description of mishap				

Swimming Pool Safety

Commit to Pool Safety



Attach a special person's photo in the life ring!

United States Department of State
Safety, Health and Environmental
Management Division

WHY IS SWIMMING POOL SAFETY IMPORTANT TO THE DEPARTMENT?

Residential and community-use pools at Department overseas properties have been the site of numerous preventable drownings and near-drownings, particularly for toddlers (children under the age of 5). The Department swimming pool safety standard specifies requirements for all swimming pools on Department overseas properties. Understanding the risks and hazards of swimming pools, knowing required safeguards and practicing drowning prevention will make pool use a safe and enjoyable experience for all. This brochure should be shared with family members, childcare providers, household staff, visitors and recreation association members.

SWIMMING POOL MISHAP DATA

Toddlers represent 60% of all drowning victims; 40% are juveniles and adults.

Most toddlers drowned in residential pools.

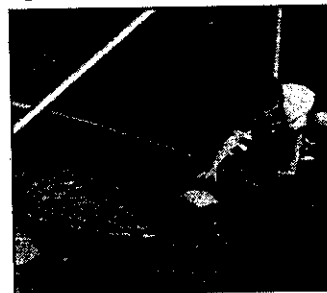
Visitors accounted for 50% of all toddler drownings and 70% of juvenile and adult drownings.

An ineffective pool barrier, an open gate or lapses in adult supervision were root causes for all swimming pool mishaps.

WHY ARE TODDLERS VULNERABLE TO DROWNING IN SWIMMING POOLS?

Drowning has been the leading cause of accidental death for toddlers in the Department and is the second leading cause in the United States. A toddler has not drowned in a Department pool that had an appropriate barrier and uninterrupted pool supervision by a responsible adult. These failings combined with toddler physiology and behavior put them at the highest risk of drowning when they are at a pool.

- Toddlers typically drown by the time their caregivers notice their absence. **Look in the pool first if a child is missing.**
- Their center of gravity is high. Combined with their lack of balancing skills when bending, they are prone to falling when leaning or reaching over the water.
- They lack the awareness to master water safety skills such as survival floatation, safe poolside behavior or energy conservation swimming.
- Toddlers drown silently without a splash or a scream. They simply sink rapidly and quietly to the bottom of the pool.
- To prevent brain damage, toddlers must be resuscitated within 3 minutes after breathing and heartbeat stop.



Always ensure that toddlers and children are directly and constantly supervised in or around the pool.

HOW CAN DROWNINGS BE PREVENTED?

Drowning risks are substantially reduced when a barrier surrounds the pool and adult supervision is provided during pool use. Pool alarms, door alarms and pool covers can supplement but not substitute for proper barriers and supervision.

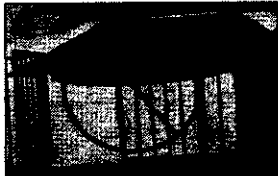


Ensuring proper barriers and providing adult supervision are the cornerstones of the Department's drowning prevention efforts.

DROWNING PREVENTION BARRIERS & GATES

Drowning prevention begins by restricting unintentional access to the swimming pool. A barrier must surround every pool and:

- Be at least 4 feet high and non-climbable;
- Prevent direct access from buildings and wading pools;
- Limit the open space around the pool to pool related activities only;
- Be equipped with self-closing, self-latching lockable hardware on all gates; and,
- Gates must not open toward the pool and must never be propped open.



DROWNING PREVENTION ADULT SUPERVISION

Adult surveillance and supervision of swimming pools is also required to minimize drowning risks. Department policy requires adult supervision (certified lifeguards or designated responsible persons) anytime children 16 years or younger are within the barrier surrounding a community-use pool. Parental or other adult supervision is strongly encouraged at residential-use pools. An adult who serves as a designated responsible person must:

- Be a proficient swimmer;
- Enforce the pool rules;
- Know how to use rescue equipment and be willing to rescue a child from the pool; and,
- Summon assistance during emergencies.

Designated responsible persons and certified lifeguards providing pool surveillance and supervision must:

- Continually scan the swimming pool, monitoring the behavior of pool users;
- Not perform any other activities unless a substitute is assigned; and,
- Close the pool to children 16 years or younger if another certified lifeguard or designated responsible person is not available.



HOW CAN I CHECK IF A POOL IS SAFE?

Use this checklist to evaluate if the pools that you and your family members use meet the Department's swimming pool safety standard. "No" answers indicate that corrective actions are needed.

- Is the pool completely surrounded by a non-climbable barrier that is at least 4 feet high?
- Does the barrier limit the pool area to pool related activities only?
- Do all gates open away from the pool and have self-closing, self-latching, lockable hardware with the latch 54" above ground?
- Are keys to locks kept where children cannot reach them?
- Is the wading pool separated from the main pool by a four-foot barrier with self-closing, self-latching, lockable gates?
- Is a certified lifeguard or designated responsible person on duty whenever children 16 years or younger are within the pool area of community-use pools?
- Are pools equipped with dual drains or anti-vortex covers on drains?
- Are depths marked at the side of the pool for each one-foot change?
- Is deck diving prohibited where pool depths are less than 6 feet?
- Is diving from a diving board prohibited where pool depths are less than 11.5' and the distance to the slope of the shallow end is less than 15' from the end of the board?
- Is the required rescue and emergency response equipment kept in the pool area?
- Is the pool deck non-slip and free of irregularities on the walkway?
- Is pool chemistry tested regularly and are chemicals stored securely and segregated if incompatible? Chlorine and flammables must be segregated.
- Are all electrical outlets in the pool area covered and ground fault protected?
- Is an emergency action plan active that addresses who to summon for help and rescue actions to be followed?



WHO CAN I CONTACT FOR MORE INFORMATION?

The Department's Swimming Pool Safety Standard can be viewed on the Safety, Health and Environmental Management (SHEM) Intranet web site at:

<http://obo.state.gov/opssaf-shem>

For additional information, you should contact your Post Occupational Safety and Health Officer (POSHO).



This pamphlet was written and produced by OBO/OM/SHEM.

February 2004

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Stevenson, Todd A.

From: Chairman Stratton
Sent: Friday, September 10, 2004 11:00 AM
To: Stevenson, Todd A.
Subject: FW: swimming pool safety for children

I don't know if this is classified as a swimming pool safety comment or not . . . am forwarding it to you to decide.

-----Original Message-----

From: Rosalie & Eric Johnson [mailto:kpi@berk.com]
Sent: Friday, August 13, 2004 2:12 PM
To: Chairman Stratton
Subject: swimming pool safety for children

Dear Mr. Stratton,

It was with great interest that I recently read about the new study being conducted by the USCPSC related to swimming pool safety and children. I am especially interested in the hearings which were held during the summer of 2004 in Florida and Arizona – I wish that I had been aware of those hearings, I would have tried to attend and present our swimming pool safety program.

My reason for contacting you is to inform you of previous efforts on my part to address the need to educate children – to teach them in a way that they can understand – to avoid being near a swimming pool when not supervised by an adult. This is a protective “safety barrier” which is presently not well developed – and should be. Most, if not all, of the safety barriers presently used are designed to prevent young children from getting into a pool, yet few of those barriers include an attempt to education the child to avoid the pool when parents are not present.

Several years ago, two other teachers and I produced a children's story book entitled: *Anthony Mouse Goes Swimming*. The main idea of the book – written for young children probably in the age range of 3 through 9 years of age – was to avoid the pool when unsupervised. We tried to interest the pool industry in taking a proactive approach. *Pool and Spa News* was very supportive – two different editors wrote three editorials and one feature article about the book. *Aqua* magazine also wrote about the book and we were sponsored by a company (Poolsaver) to present our book at the NSPI Expo in Atlanta. Overall though, we found the pool industry was not terribly interested in pool safety programs. I do feel that the attitude is changing and I am again interested in presenting our program.

In addition to our book, we also developed several other items:

1. The Anthony Mouse Goes Swimming Educational Packet. It contained one copy of the book and 13 book and safety related worksheets for children to complete (types of sheets: dot-to-dot, pages to color, mazes to complete, poster etc). These packets were designed for stores to use in children's corners, or to distribute 1 design each week, or donate the packet to schools or other water safety programs (there was available space on each sheet for companies to print their names, address and telephone number in order to gain publicity). The sheets in each packet, once purchased for an address, could be photocopied as needed.
2. We developed a contest which swimming pool companies or safety organizations could use to attract the attention of adults and children, and present a safety message. They could also gain publicity.
3. We developed a child-friendly sign (using a drawing based on the book) which clearly presented the idea that children should not be near the pool without a parent (the sign did not use any

9/10/2004

words since young children cannot read).

4. We also began to investigate the possibility of printed towels and T-shirts with reminder messages (images) on them – but did not actually do anything in production.

I truly believe that children must be taught to stay away from pool areas when unsupervised – and there is no guarantee “when” or “if” children learn that – still we must try. We as parents constantly attempt to teach our children many things related to safety as well as living in general, so I believe in positive education. I believe our book could help in the teaching of the concept to avoid the pool when unsupervised. There is no program, of which I am aware, that attempts to accomplish that goal. A number of the programs I have reviewed actively teach children to “always swim with a buddy” – a concept I believe to be incorrect – they need to swim only with an adult.

If children were taught in a manner related to their ability to remember or understand, if they could be taught that the process for entering the pool area includes a parent, maybe a few more drowning deaths could be avoided. Depending on the process taught to children, maybe a delay of a few minutes would occur before children went near the pool, thus giving parents a few more minutes of safety time.

Have I interested you in our approach and our work? If so, please feel free to contact me by telephone at 518-784-3907 or by email at: kpi@berk.com .

Thank you for your time – I look forward to hearing from you.

Sincerely

Rosie Johnson

Pool
Committee

“The Effects of Legislation of Pool Fencing in Australia”

(Submitted to the Consumer Product Safety Commission)

The value of isolation fencing, which separates the pool from the home, in preventing young children from drowning death or injury has been demonstrated most effectively in Australia, where, as in other areas with warmer climates, drowning is the leading cause of accidental death among children under the age of five.

Studies both in Australia and overseas have shown that isolation fencing of swimming pools is highly effective in reducing child drownings, with the most important element being a secure, self-closing and self-latching gate.

In the Australian state of Queensland, it has been mandatory since 1992 for all swimming pools to comply with the Australian Standard for Pool Fencing, with new pools requiring four-sided isolation fencing between the house and the pool, but with existing pools having less stringent requirements.

According to studies published by the Mater Clinical Epidemiology Centre¹ in the city of Brisbane, in the 8-year period leading up to the enactment of these requirements, an average of 12 children under five drowned annually in residential pools in Queensland – and that’s just one small Australian state of only 3.5 million people. This is perceived to be a national disgrace, and child drownings are dealt with relentlessly by the Australian media.

An average of seven toddlers per year have drowned in the subsequent, comparable time period, despite a significant increase in the number of pools. Experts in the field estimate the number of pools in Queensland has at least *doubled* over the last 10 years to over 300,000. Therefore, the rate of drowning has been reduced by well over the 41% indicated by the raw figures.

In the Mater Clinical study, only one child who drowned climbed a pool fence. Six other pools had problems, including gates that had been left open at the time of the drowning. Three children drowned in pools which had been installed prior to 1991, and had no fence, nor fencing requirement. In the drownings that occurred in the six years after pool fencing legislation was enacted, only 16% of the in-ground pools in which a child drowned were found to comply with pool fencing codes.

Thirty-seven in-ground pools in which children drowned were not in compliance with the code. They were either unfenced, had a non-compliant gate which didn't self-close nor self-latch, had a non-compliant fence or property-line fencing only.

Queensland is comparable to most areas with high incidences of toddler drownings. In the majority of cases that have been studied, the responsible adult had no idea the child was even near the pool.

The Mater Clinical study concluded that less than 5% of drownings take place in pools that have 4-sided fencing and effective, self-closing gates in good working order.

The vast majority of toddlers who gain access to a fenced pool do so through a gate that doesn't shut and latch automatically or via a house door in three-sided property line configurations that were permitted for pools built prior to 1991.

In an article published in the journal *Injury Prevention* in December 2000, C. Blum and J. Shield of the Royal Children's Hospital in Victoria, Australia, reported on a study² which critically reviewed all completed investigations into the drowning deaths of toddlers aged 1-4 years that had been reported to the state coroner from 1992 to 1997, a total of 33 toddler drownings.

Over half of the pools involved in the drownings lacked fencing of any kind, and of those that did have fences, only three appeared to have met Australian standards.

The authors concluded that in not one case did a child gain unaided access to a pool fitted with a fully functional gate and fence that met the Australian Standard. Where children gained access to fenced pools, the majority did so via faulty or inadequate gates, or through gates that were propped open. Door locks and supervision were shown to be inadequate prevention strategies.

Many other studies have backed up these findings³, yet there is a great deal of public resistance to any barrier legislation. Objections range from the issue of personal freedom to aesthetics and to the cost of the barriers.

Typically, both real estate and swimming pool trade organizations have been opposed to such regulations, even when they allow for the use of other layers of protection such as alarms, automatic door-closers or power pool covers as options in lieu of fencing. And even after the passage of barrier codes, there are still issues to be addressed, such as compliance and enforcement.

We need better standards worldwide and better policing of those standards. Today, where there are strong fencing codes in place and homes are compliant, 80 to

90 percent of the time when a drowning occurs, it happens due to a faulty latch or hinges on a gate.

D&D Technologies, based in Sydney, Australia, was born of the Australian Standards for Pool Fencing and Australian government legislation, considered by most industry experts as the strictest in the world. These standards forced management to “think outside the box” to develop reliable and effective self-closing and self-latching gate hardware, including Magna-Latch magnetic, self-latching gate latches and Tru-Close, self-closing hinges

Many corporations involved in the manufacture of pool safety products have assumed an active role in drowning prevention advocacy. D&D Technologies is a prime example of this type of corporate responsibility.

The company has expended a great deal of effort to create a synergy to develop a program worldwide to reduce the problem of toddler drownings. For D&D Technologies’ drowning prevention efforts, the company was awarded the prestigious Kidsafe Award for 2000 from the Child Accident Prevention Foundation of Australia.

Corporations like D&D Technologies, in partnership with other drowning prevention advocates, need to develop methods to move forward and enact a call to action. The Australian experience has demonstrated that barriers DO save lives, and methods need to be developed to bring about critical change now.

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