

## *Safe N' Sound*

Implementation of a tool to  
assist in community injury  
prevention in a healthcare setting

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# Problem

- Locally 3,140, 0-4 year old ED visits in 2003, 57% home/vehicle.
- Only one FTE for Injury Outreach but large catchment of providers and healthcare offices.
- Counseling is common place in well child visits and hospitals gravitate toward injury programs.
- Current messaging present a broad stroke of many risk behaviors to families at this age
- Injury risk and reduction messages related to the child's age/development and change rapidly
- Providers must pick current messaging by age with no prioritization of risk, without a larger time intensive assessment.
- Providers must tailor to family within time constraints

# Safe N' Sound

- A computer based tool to collect real time self reported caregiver risk behaviors on home and motor vehicle injuries for children age 0-4 and provide tailored



prioritized feedback to initiate behavior change and guide anticipatory guidance.

# Study Design

- For the first part of this study, we used five offices to collect barriers and facilitators to adoption and implementation in a three phase process with qualitative data tools.
- We also collected use of the program through quantitative data collected by the computer and matching that with chart audits.

# Study Design continued

- Outputs also allowed us to look at if injury risks identified mirrored community injury risks
- And we identified sub groups of types of injuries within populations of the community to enhance educational opportunities in that area with their risk topics.
- And lastly, began looking at other placements and uses for the device

# Device Selection



# Implementation

- Caregivers self selected to use the device in three settings ( five pediatric clinics, Emergency Room, Patient Resource Library) guided by prompts ( banners, signs, brochures, invite from front desk staff).
- Caregivers entered name of child to allow for personalization and age of child to identify appropriate risk questions.

The pediatric offices were funded by an extramural grant from the Eunice Shriver Kennedy National Institutes of Child Health and Development.

### Fences can be lifesavers

The biggest drowning risk for ALEXANDRIA is that your swimming pool is not surrounded on all four sides by a fence. Once ALEXANDRIA is outside, there's nothing to stop her from reaching the pool's edge. Because it may be easy for ALEXANDRIA to get to the pool she is in greater danger of falling in. After only two minutes underwater, a child will become unconscious. Lasting brain damage can happen after just 4 minutes. Your pool may also be a danger to any other children in the neighborhood. Put a fence completely around your pool, not just around your yard. Also use a self-locking gate. And of course, never leave ALEXANDRIA alone by the pool.

### Did you know?

- Drowning is often called the "silent killer" because you may not hear a cry for help or the sound of a splash.
- Among infants, the top three places of drowning are bathtubs, toilets, and buckets.
- About 50% of preschooler drowning (ages 0 to 4) occur in home swimming pools.

Many young children enjoy splashing and swimming in water. But water play isn't just fun and games. Children can drown in less than 1 inch of water. Pools, kiddie pools, the bathtub, the toilet, buckets, and even puddles can be dangerous for young children.

### What to DO

1. To make the pool safer for ALEXANDRIA, put a fence that's at least four feet high around all four sides of your pool, not just around the yard. The fence should have a self-locking gate with a lock on it that's too high for a child to reach. This may cost a lot of money, but it's not as costly as the loss of a life.
2. Never leave ALEXANDRIA alone in the area around the swimming pool, even for a few seconds.
3. Remove all pool toys from the pool when you're done playing with them so ALEXANDRIA isn't tempted to reach for them.
4. When ALEXANDRIA gets older and starts playing in the pool, do not count on swimming lessons or "floaties" to keep her safe. Always stay with ALEXANDRIA and give her your full attention.
5. Keep a phone and rescue equipment, like a life saver and a long pole, by the pool.



### Why we're getting a fence around the pool

I live in an apartment building that has a pool. There isn't a fence around the pool but that doesn't bother me. I watch my children closely when they're near the water. I just found out that my landlord is going to put a fence with a self-locking gate around the pool because a kid almost drowned. When I heard, my first thought was, "That kid wasn't being watched." But I heard from a neighbor that his mother was right there. She was carrying groceries into her apartment and the kid was running all over the place. He just slipped into the pool. My landlord says that a fence and a self-locking gate will stop kids from being near the pool unless they're swimming with an adult. After what almost happened to that little boy, I have to agree. That could have been my child who almost drowned.

# Feedback form

- Two risks identified from prioritization and by age differentiation from caregiver responses
- Content on beliefs model
- Four pages
- Provider sheet as applicable
- \* Previous studies behavior change.



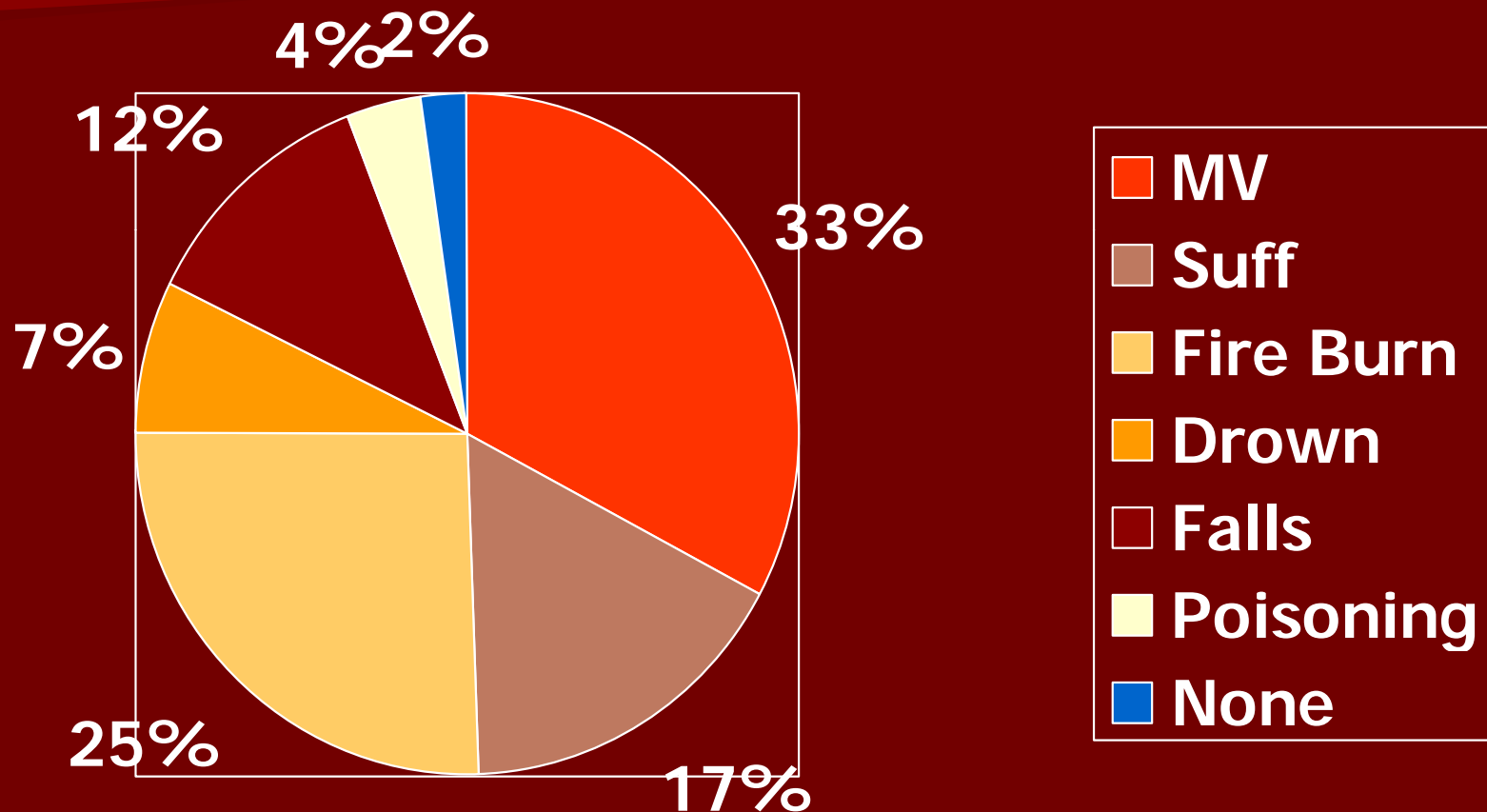
# Results

Users- Clinics only

- 48.9% Female 51.1% male ( child)
- 67.8% mothers
- 26.2% high school or less
- 38.4% under 50,000 income
- 52% Caucasian

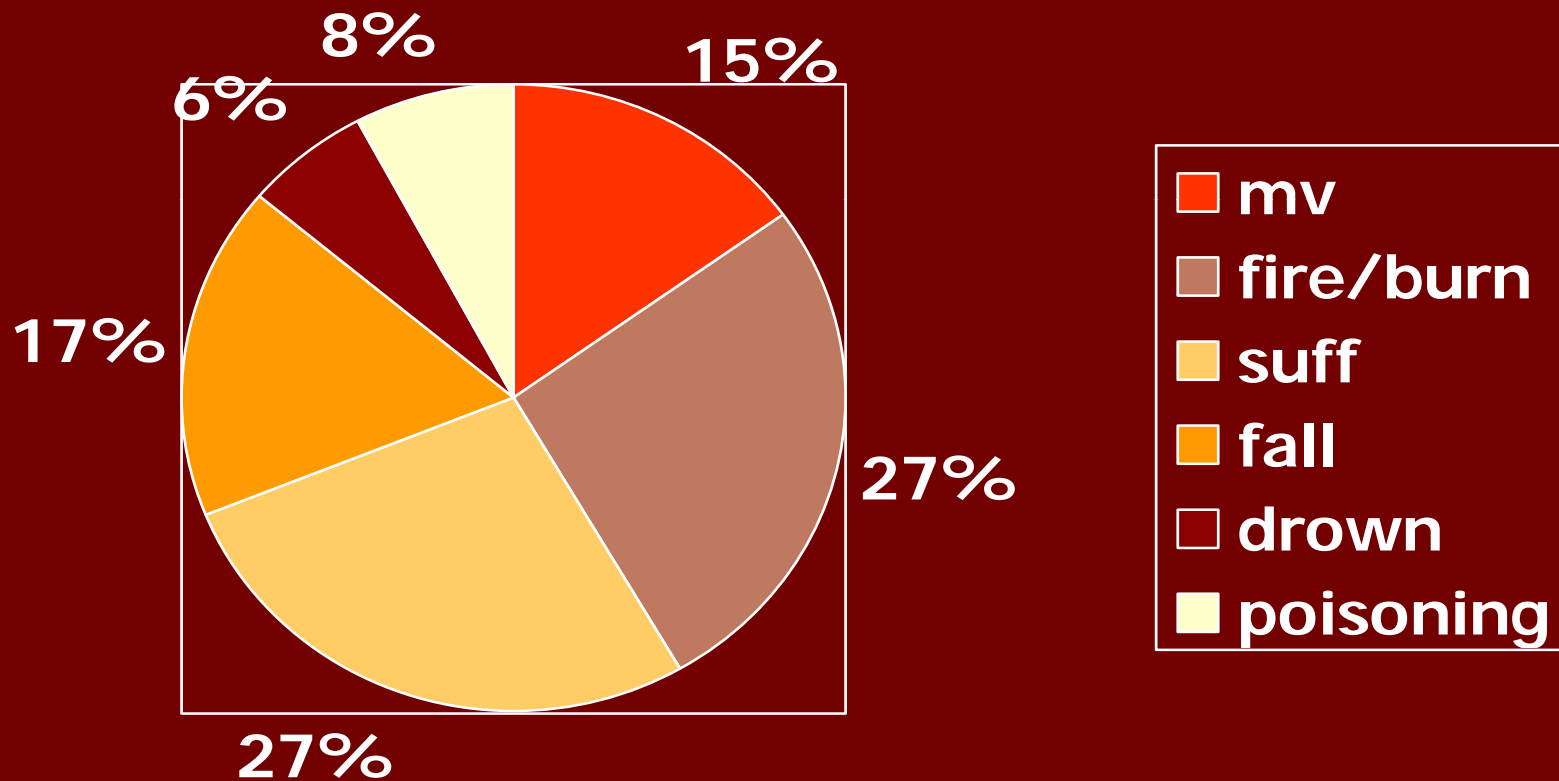
12.3% Hispanic/Latino \* program usage  
note

# Highest two risk areas identified by kiosk users at clinic sites N=1744



# Age 1

18.6% of sample

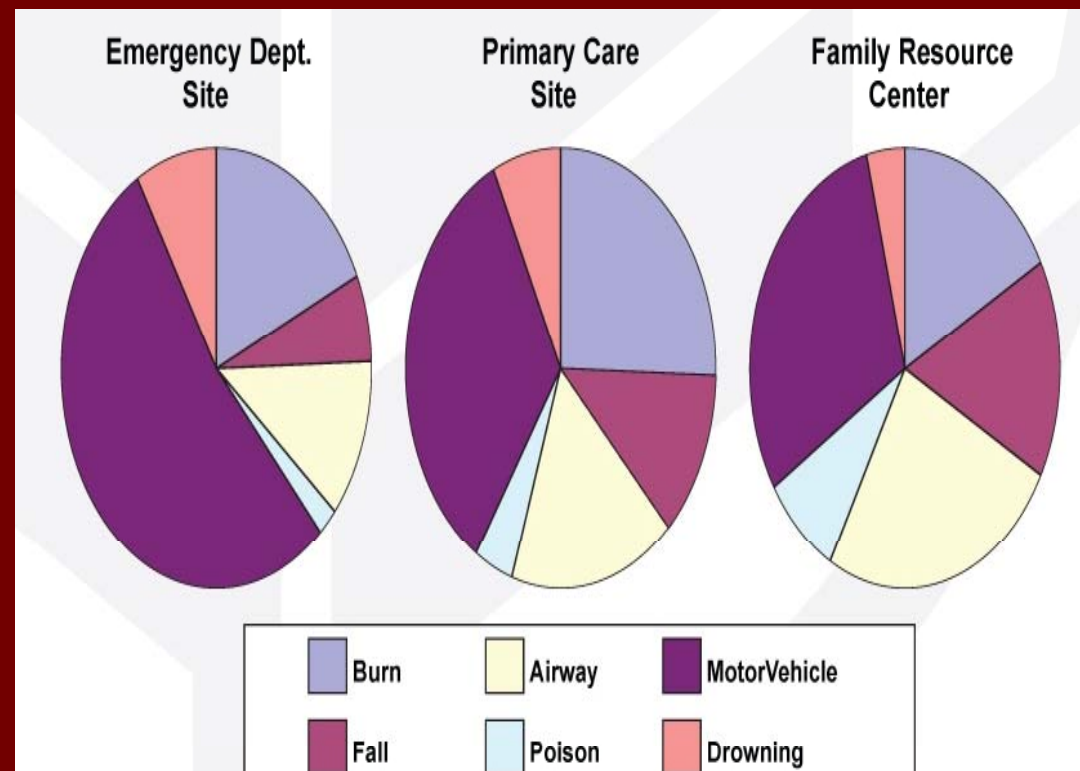


	<b>MV</b>	<b>Drowning</b>	<b>Burn/Fire</b>	<b>Suffocatio</b>	<b>Falls</b>	<b>Poisoning</b>
All Clinics	559 (32.8%)	125 (7.3%)	432 (25.4%)	283 (16.6%)	207 (12.1%)	62 (3.6%)
<b>Mortality</b>						
National - total	271.6 (13.2%)	517.4 (25.1%)	246.8 (12%)	918.0 (44.5%)	61.8 (3%)	47.4 (2.3%)
National - rate	1.34	2.55	1.22	4.53	0.31	0.23
State - total	20.3 (19.3%)	17.0 (16.1%)	11.7 (11.1%)	52.7 (50%)	1.7 (1.6%)	2.0 (1.9%)
State - rate	2.02	1.69	1.16	5.24	0.17	0.2
<b>Morbidity</b>						
National - total	46703.0 (4%)	2530.2 (0.2%)	67305.4 (5.8%)	13439.4 (1.2%)	98350.6 (84.4%)	52469.8 (4.5%)
National - rate	230.5	12.5	332.2	66.3	4854.6	259.0
State - total	4039 (6.3%)	181 (0.3%)	3914 (6.1%)	500 (0.8%)	50233 (77.8%)	5717 (8.9%)
State - rate	208.2	9.3	201.7	25.8	2589.2	294.7

# Differences across sites

- N=3388
- Clinics primarily under age 2.
- Emergency room primarily over age 2.
- Differences within each clinic site

## Differences in risk by site



# Across sites – tailoring message to population

- There were differentials among sites

Highest suffocation- 1

Highest burn/fire -2

Highest motor vehicle- 2

Program highlights and allows for differentiation among practices to tailor more education.

# Tailored Outreach



# Facilitators

- Anticipatory guidance an integral part of healthcare already.
- Requires minimal staff time
- Computers are easily supported by hospital IT.
- Provides enhanced physician contact time and risk feedback/ education tailoring
- Multiple visits for healthcare in this age period.



# Barriers and Obstacles

- Not all risk behaviors can be covered
- Inter-professional gradient for full compliance
- Computer Interaction not currently expected in waiting room= less parent perceived initial interest and more staff time/visual cues
- Payment system
- Computer technology not quite there

# Questions

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Information:

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