Ohio AAPs Comprehensive Approach to Addressing Ohio’s Infant Safe Sleep

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Infant Mortality

• Death of an infant before their first birthday
  – # dying/# live births in a year x 1000

• Two stages
  – Neonatal – Birth – 27 days
    • 2/3 of all infant deaths
    • Common causes = preterm births, birth defects, maternal health conditions, complications of labor and delivery, and lack of access to appropriate care
  – Post-neonatal – 28 days – 364 days
    • 1/3 of all infant deaths
    • Common causes = Sudden infant death, Injury, Infection, Abuse
Ohio AAP’s Approach

• Address 3 issues to combat post-neonatal deaths
  – 1) Pediatrician education about injury and safe sleep
  – 2) Infant safe sleep
    • A) Statewide campaign
    • B) Hospitalist program
  – 3) Child abuse and maltreatment
1) Pediatrician Counseling

- Every well child office visit pediatricians are to discuss anticipatory guidance issues
- If done well regarding injuries, it is effective
  - Increased knowledge about injuries
  - Behavior change
    - Motor vehicle restraint use, Safe home hot water temperature checks, Smoke alarm use, Infant safe sleep
  - Decrease in injuries
    - Falls and other home, Automobile
- IP counseling by pediatricians costs $11 per child ages 0-4, and it generates $97 per child in benefits to society

-Bass, Pediatrics 1999
-DiGuiseppi, Future Child 2000
-Miller, Cost of Injury Prevention 2010
Challenges in Providing Counseling

- Not enough time
  - \( \frac{1}{4} \) of time to address all US Prevention Task Force counseling - 1/3 injury related
  - “Drowning in Sea of Advice’
  - 57 AAP policies with 192 discrete directives - 2/3 injury
- Limited training on issues
- No reimbursement
  - Direct time towards other initiatives
OH AAP Quality Improvement Program

- Developed a tool to assist pediatricians in screening families for injury risk
  - Enabled them to spend more time on high-risk issues
- Enrolled pilot group of pediatricians in QI program
- Offered MOC Part 4 Credit for participation
Wave 1—Sept 2011–May 2012

- Concentrated on < 1 year
  - Least surveyed age
- Different tool for each of 6 WCVs
- Primary goal = Use the tool consistently

<table>
<thead>
<tr>
<th>Topic</th>
<th>% Addressed Pre-Study (n)</th>
<th>% Addressed at End of QI Program (n)</th>
<th>% Δ</th>
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<tbody>
<tr>
<td>Car seat</td>
<td>41.16 (396)</td>
<td>80.12 (332)</td>
<td>38.96</td>
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<tr>
<td>Sleep</td>
<td>48.0 (300)</td>
<td>93.89 (262)</td>
<td>45.89</td>
</tr>
<tr>
<td>Fire/burn</td>
<td>35.5 (200)</td>
<td>92.61 (176)</td>
<td>57.11</td>
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<tr>
<td>Family</td>
<td>28.0 (300)</td>
<td>91.19 (261)</td>
<td>63.19</td>
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<tr>
<td>Fall</td>
<td>38.06 (494)</td>
<td>87.96 (407)</td>
<td>49.9</td>
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<tr>
<td>Supervision</td>
<td>20.81 (298)</td>
<td>94.42 (251)</td>
<td>73.61</td>
</tr>
<tr>
<td>Water</td>
<td>10.77 (195)</td>
<td>95.67 (231)</td>
<td>84.9</td>
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<tr>
<td>Choking</td>
<td>44.67 (197)</td>
<td>95.35 (172)</td>
<td>50.68</td>
</tr>
<tr>
<td>Ingestion</td>
<td>34.01 (197)</td>
<td>86.27 (153)</td>
<td>52.26</td>
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<tr>
<td>Play</td>
<td>17.86 (196)</td>
<td>93.51 (154)</td>
<td>75.65</td>
</tr>
<tr>
<td>Home</td>
<td>40.31 (196)</td>
<td>91.56 (154)</td>
<td>51.25</td>
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</table>
Wave 2 – Currently Underway

- Tool condensed to 2 forms
  - Birth-4mos & 6mos-1yr
- Funding for practices – Healthy Tomorrow’s grant
- Sleep sacks provided
  - Thank you to the Ohio Children’s Trust Fund
- Primary goals
  - Increase family discussions
  - Assess behavior change based on counseling
2) Safe Sleep Initiatives

• A) Statewide marketing campaign
• B) Children’s Hospital program
Sudden Unexplained Infant Death

• 3 components
  – Suffocation/strangulation
  – Ill-defined death
  – SIDS

• 4500 deaths/year
  – ½ from SIDS
  • Greatest cause of infant death in post-neonatal period

• Success of AAP “Back to Sleep” Campaign
  – New recommendations
    • Alone, Back, Crib
Statewide Campaign

- Mirrored after our bike helmet initiative
  - Goal = Increase helmet usage to at least 30% in next 5 years
    - Marketing Campaign
      - Helmet dispersement
    - Data Collection
    - Pediatrician initiative
    - Passage of legislation
Marketing Campaign

Statewide Media Outreach
- Print
- TV
- Radio

Social Media
- Put A Lid on it FB page
- FB add targeting parents of kids < 15 years

Legislative Advocacy

School Outreach
- Elementary School Administrators’ Association

Grassroots outreach
- Bike shops
- E-news to AAP members
- OIPP, ODH, OPHA
- Childrens’ Hospital Association
Initiatives

• Toolkits
  – Educators
  – Legislatives
  – Partners
  – Media

• Helmet giveaways
  – Schools, churches, etc.

• Legislator events
Bike Helmet Media Results

- Over 1,000 “likes” on Facebook
- State and National
  – Wall St Journal coverage
  – Touched 12 million by earned media
Safe Sleep Marketing

• Paid and unpaid media
• Brochures
  – Developed through ODH focus groups
• Sleep sack dispersements
• Legislative, hospital, and pediatrician buy-in
Children’s Hospital Program

• 6 Children’s Hospitals in the state
  – Manageable group to start program

• Problem
  – Despite AAP recommendations, health care providers and staff do not always model safe sleep practices in the inpatient setting
  – Parents are likely to model actions and behaviors demonstrated by health care providers rather than verbal instructions
Safe Sleep Compliance Other Children’s Hospitals

• Arkansas
  – Initial audit
    • 20% prone, 48% multiple blankets, 8% positioning devices

• Kansas
  – Initial audit
    • Only 17% of infants in a safe sleep environment
1. Each hospital will show that > 90% of children ≤ 1 year of age will be in “safe sleep” position (own crib, nothing in crib and on back) on random weekly audits by the end of the 10-month project.

2. > 90% patients 1 year of age and younger will leave the hospital with information on safe sleep practices.

### Objectives

- Each hospital will show that > 90% of children ≤ 1 year of age will be in “safe sleep” position on random weekly audits by the end of the project.

### Key Drivers

- Nursing Education
- PCA, PT/OT (Multi-Disciplinary) Education
- Physician Education
- Parent/Caregiver Education
- Management of Environment

### Interventions (Ideas)

- **Marketing**
  - Nurse Champions/RN Care Partners
  - Scripting for/with Parents
  - Safe Sleep “Cheat Sheet”

- **Grand Rounds**
  - Hospital Pediatrics Web module

- **Safety Videos/Edutainment System**
  - Take-Home Magnets (Marketing)
  - Brochures (ODH)
  - Safe Sleep Posters (Clinics/Off-Sites)

- **Sleep sacks**
  - Assess hospital policy on clothing allowed for patients
  - Mattresses on beds need evaluated
  - Fitted Sheets?

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This key diagram is based on a tool that was developed, tested, and is being shared with the Ohio Chapter, American Academy of Pediatrics by Dr. Jamie Macklin, Nationwide Children’s Hospital.
Action Plan

• Hospital champion teams selected
• February-March 2014 – 8 weeks
  – Audits at each hospital – baseline data
• April 2014 – February 2015 – 10 months
  – Education of staff
  – Continued audits / data tracking
• Expansion to birthing hospitals
Child Abuse and Maltreatment

• During 2008
  – An estimated 1,740 US children died from abuse or neglect
  – Rate of 2.33 deaths per 100,000 children
• Children under 1 are the main age group contributing to child maltreatment fatalities in the National Violent Death Reporting System
  – Abusive head trauma is the main cause of these preventable, senseless deaths.
Ohio AAP Child Abuse Action Plan

- Pediatricians to screen families for potential risks of abuse and providing them with talking points and resources to prevent traumatic head injuries
- Sub-committee of Child Abuse experts that meet regularly to discuss best ways to screen families and review best practices
- Several pediatricians review child fatalities on a local and state level to determine causes of death in children < 1 years in order to assess trends so appropriate prevention strategies can be targeted
Summary

• OH AAP committed to reduce infant mortality in Ohio
  – Working to reduce post-neonatal deaths
• 3 pronged approach
  – Pediatrician counseling
  – Safe sleep initiatives
  – Child abuse and neglect interventions
• Next steps
  – Funding to continue current work
  – Start to show results from evaluations of programs