



Presentation Title: Child Safety Seats From the Ground Up

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I. Formative Evaluation – Planning

As a fast-growing community in a rural setting, statistics began to climb for vehicle collisions and injuries/fatalities to vehicle occupants in those collisions. The St. John's Fire District (STJFD) conducted a formative risk assessment using vehicle collision data from police agencies and state resources. STJFD analyzed a 10-year pattern as the area has experienced a swell in population over the last 10+ years. The catalyst for this assessment was a multiple fatality accident that involved children. Although the local data showed more injuries and fatalities to other age groups, paired with national data, local experience, and availability of the program, the department intended to implement a child safety seat program.

Specifically, data was analyzed involving contributing factors to these collisions and the ages of injured victims. Our local experience corroborated the reports from the National Highway Traffic Safety Administration and the Safe Kids Worldwide report that 90% of child safety seats are installed incorrectly or misused.

Community demographics were analyzed to determine our at-risk audience. A local outreach ministry expressed concerns that many times their Spanish-speaking clients arrive at the outreach center with multiple children and no car seats or car seats that are damaged or expired. Through community associations, we discovered a large "new family" population of those who lived in suburban areas of the District, and the neighborhoods had many families with infants or young children. We also began to track the number of people who sought help from our department via phone or in-person.

STJFD and departments county-wide embraced child passenger safety as a risk reduction priority and made it a priority in strategic planning. Program goals included:

- Increase the number of certified child passenger seat technicians (CPST) and CPST instructors.
- Partner with local organization/department with experience in child passenger safety.
- Increase the amount of knowledge in the community on car seat misuse and correct use of the seat, and correct installation measures.
- By the third project year, reduce the amount of vehicle collision-related injuries and fatalities to children under the age of 12 years by 50%
- Increase the amount of child safety seat inspections and community events each year.
- Create a regional approach to child seat safety and expand use in other public safety and community organizations.
- Provide this service free to the community.
- Conduct immediate post-event and 6-month surveys.
- Partner with local police agencies on car seat laws and on referral cards that can be used when they are making contact with residents and see misuse

II. Process Evaluation – Implementation

Department technicians met with local agencies and Safe Kids (certifying body) to become instructors. While the technicians became instructors, others became technicians. STJFD established community events and seat checkpoints, and with the support of other organizations and departments, expanded to the entire region. The new department instructors offer in-house and regional training including about five annual Child Safety Seat Technician courses. There are regular community checkpoints, and the department established a fitting station at a station where technicians are on duty station. The local Sheriffs Office provided referral cards when they witness the misuse of a seat.

Partnering with the South Carolina Department of Health, STJFD obtained car seats free of charge for caregivers that have damaged or expired seats or do not have the means to purchase a new seat. After obtaining a grant from GRACO, the department and Safe Kids were able to partner with a Hispanic outreach center in our jurisdiction and, with the help of interpreters, provide new car seats and installation knowledge.

III. Impact Evaluation – Short-Term Results

A follow-up survey is sent two weeks after each child safety seat inspection, and a second is sent after six months to evaluate the experience and knowledge level. If a caregiver indicates it may be time to change seats, technicians follow up with the caregiver. Survey returns hovered around 50% for the two-week survey and 35% return for the six-month surveys. The survey demonstrated an increased knowledge for over 92% of caregivers surveyed, including increased confidence in selecting, installing, and maintain a child safety seat.

Child safety seat inspections increased from 15 child safety seat inspections in the first year of the project to over 112 in the third year. The program went from two technicians to two instructors and 15 technicians. Community events (including regional events) went from four a year to ten a year. Regionally, the program has grown from dozens of technicians to hundreds of technicians.

IV. Outcome Evaluation – Long-Term Results

In 2017, 2018, and 2019, injuries to children in vehicle collisions in our jurisdiction reduced by 19% and there were no documented child fatalities, while the number of vehicle collisions has increased, as did overall calls for service and the total population.

Recommendations for others:

Stakeholders. An important piece was finding internal stakeholders and external stakeholders for program success. Many of the technicians in our department have families of their own and are great resources when working with caregivers. Externally, partnering with agencies that directly work with at-risk families was critical to its success.

Time. Becoming a technician is a 3-4 day class, but it also takes time, experience, and mentoring to become proficient. Staying up to date on technology and installation procedures on seats is difficult due to the rapid development of new products. Becoming an instructor or senior checker takes time; the instructor process sometimes takes over a year. Prepare to grow gradually.