



Background

In Coconino County, 45 people have lost their lives in motor vehicle accidents in 2021. This number increased to 60 in 2022 (Coconino County Community Health Assessment 2, 2024). Motor vehicle crashes remain a leading cause of death for children in Arizona at 17% (Arizona Child Fatality Review Program et al., 2022). North Country HealthCare is a federally funded community health center that provides affordable and accessible primary care. We partnered with A Mother's Journey, a program provided by North Country HealthCare, to increase car seat safety knowledge in Coconino County. A Mother's Journey is a support group mainly for people who are pregnant or have a child and feel like they want some help with parenting (North Country HealthCare, 2024).

In 2022, 599 child passengers aged 12 and under were killed in motor vehicle accidents in the United States, and around 106,000 were injured (CDC, 2024). Car seats can help reduce the risk of fatalities and injuries by 71% for infants and 54% for toddlers (United States Department of Transportation, 2024). Proper car seat use can reduce the risk of injury and death. Therefore, our interventions focused on increasing the self-efficacy of parents and guardians with car seat safety. This includes organizing a car seat event with certified car seat technicians to guide parents with properly installing car seats, presenting about car seat safety at A Mother's Journey meeting, and distributing car seat safety handouts.

Population

Our target population is families, and more specifically, parents and guardians who have children aged 0-13 who reside in Flagstaff, Arizona. In 2023, it was reported that children aged 0-9 make up 11% of the population of Flagstaff, while those aged 10-19 represent 13% of the population (Census Reporter, 2023). We are mainly targeting mothers because A Mother's Journey mostly gets mothers' attendees; however, anyone who needs parenting guidance is welcome, which means fathers and partners are also welcome to attend. Our mission is to provide support, education, and resources to parents and guardians.

Community Agency

Our team collaborated with Flagstaff's North Country HealthCare's A Mother's Journey. A Mother's Journey serves mostly mothers, and it offers support for pregnancy and postpartum. The support groups address a wide range of health issues, depending on what the mothers may need. This support group is also open to fathers as well as any parents and guardians who want to come. For this initiative, we will specifically focus on educating parents and guardians about car seat safety in partnership with A Mother's Journey. Their mission is to provide affordable, accessible, quality primary care in an atmosphere of dignity and respect where the health and well-being of patients and the community are promoted through direct services, education, outreach, and advocacy (North Country Healthcare, 2024).

Theoretical Framework

Expectations (Personal Factors)

- If parents and guardians can fully understand the protective/safety benefits of car seats, they are more likely to use them consistently
- If parents and guardians have a genuine belief that car seats will keep their children safe then they are more likely to use them correctly

Social Cognitive Theory

Determines Human Behavior (Reciprocal Determinism)

- Vicarious Reinforcement (Environmental Factors)**
- Parents and guardians see Public Health Campaigns using car seats correctly which reinforces the idea that it is a responsible behavior that is valued

- Self Regulation (Behavioral Factors)**
- Parents control their behavior around how they install and use car seats
 - They also control if they stay consistent in using car seats properly

Interventions

Car Seat Drive-Thru Event

This event was organized with the support of our supervisors, Tori and Sydney, and in collaboration with Coconino County Health and Human Services. In preparation, our group created and distributed flyers to preschools and health facilities throughout Flagstaff. At this event, 5 certified car seat technicians checked the car seats of parents and guardians who stopped by.

Car Seat Safety + Tips Infographic

Our group created an infographic including information and tips about car seat safety. We handed out this infographic to parents and guardians at the car seat drive-thru event so they could put it on their fridge or hang it up. On the infographic, we provided a QR code for a post-test about the car seat event and asked questions about self-efficacy and confidence.

Car Seat Safety Presentation

We created a 45-minute presentation on car seat safety to present at A Mother's Journey support group. We provided a pre- and post-test for the attendees to take, which was helpful to see their self-efficacy improve upon the information presented. At this presentation, we had 2 North Country employees and 1 mother in attendance.

CAR SEAT SAFETY + TIPS

MORE THAN HALF OF CAR SEATS ARE NOT USED OR INSTALLED CORRECTLY.

SAFETY FIRST

BUYING THE CORRECT CAR SEAT AND USING IT PROPERLY CAN REDUCE THE RISK OF DEATH OF A CHILD BY 71%.



THE BEST CAR SEAT FOR A CHILD UNDER 2 YEARS OLD IS A REAR FACING SEAT. SINCE IT HAS A HARNESS, IN THE EVENT OF AN ACCIDENT THE SEAT CRADLES AND MOVES WITH YOUR CHILD TO PROTECT THE CHILD'S NECK AND SPINAL CORD.

CAR WRECKS ARE A MAJOR CAUSE OF DEATH FOR CHILDREN AGED 1 TO 13.



WHEN INSTALLING YOUR CAR SEAT, YOU'LL NEED TO DECIDE ON USING EITHER THE SEAT BELT OR THE "LATCH" SYSTEM TO SECURE YOUR CAR SEAT. BOTH ARE SAFE, BUT DON'T USE THEM BOTH AT THE SAME TIME.

PLEASE SCAN THIS QR CODE TO TAKE A SHORT SURVEY ABOUT OUR CAR SEAT EVENT!



Car Seat Event!

Join us for a free car seat inspection and safety checks performed by certified technicians!

When: Saturday, March 29th • 10 AM - 1 PM

Where: 2920 N 4th St. Flagstaff, AZ 86004

Informational brochures will be available for attendees.

If you have any questions please call:
928-522-9430

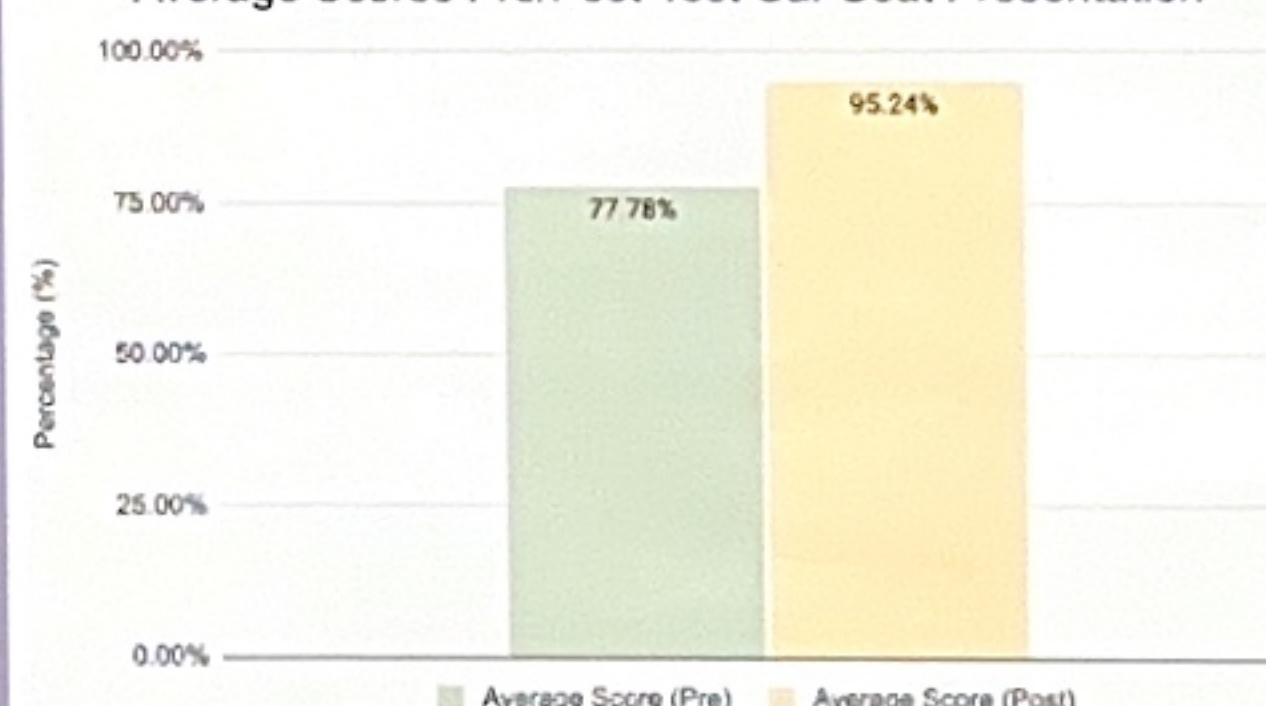


Results

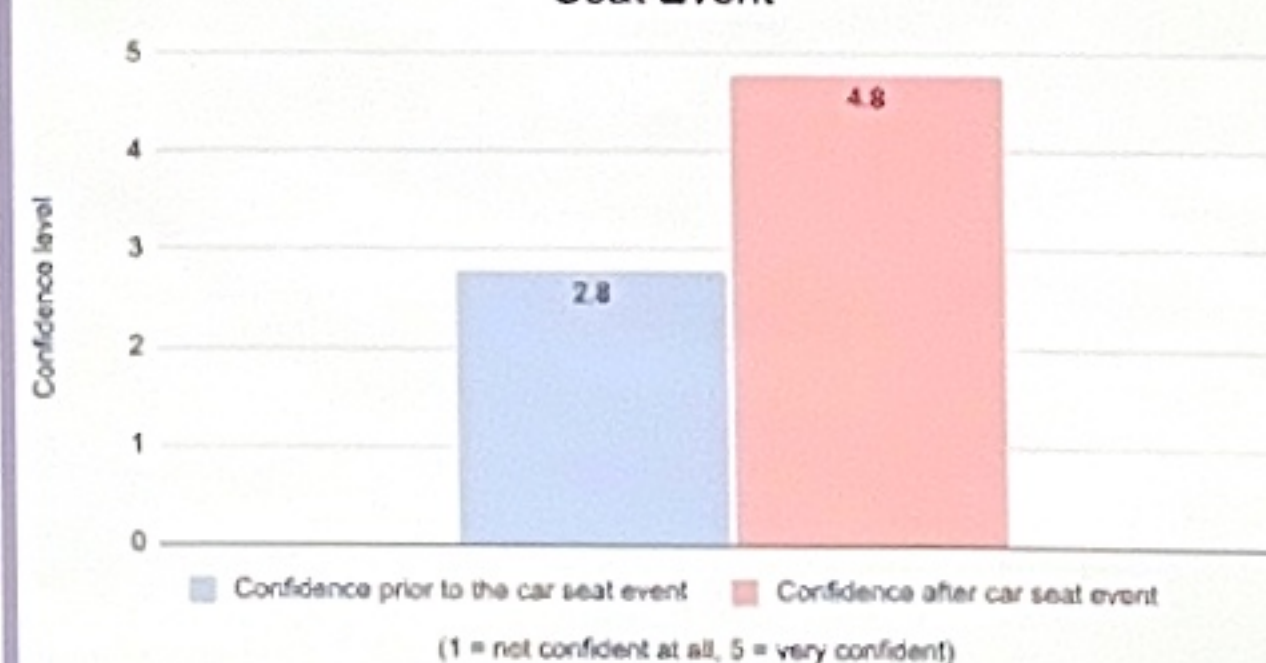
1. Prior to the car seat event, participants reported an average to be 2.8 out of 5 on the confidence scale. By the end of our event, participants reported an average to be 4.8 out of 5 on the confidence scale.
2. Prior to the presentation, participants had an average score of 77.78%. After the presentation, participants had an average score of 95.24%.
3. Prior to the presentation, participants reported an average of 33% of knowledge on rear-facing car seats. By the end of the presentation, participants reported an average of 83% of knowledge on rear-facing car seats.

Overall, we met almost all of our impact objectives. We are happy with the outcomes, and it was good to see all of the changes from the pre- and post-test. We were also satisfied with the results from the car seat event and how people felt more confident afterwards. During the car seat event, Coconino County gave away two new car seats to a participant, and that was rewarding to see.

Average Scores Pre/Post-Test Car Seat Presentation



Average Confidence in Installing Car Seats Before/After Car Seat Event



Impact Objectives

1. By the end of the event on March 29th, 100% of participants will report an increase in their confidence/self-efficacy in properly installing car seats, as measured by a QR code survey on their perceived ability to install car seats correctly.
2. By the end of our presentation on April 9th, 90% of those who attend will have a better understanding of the dangers of improperly buckling your child in the car (Aiming for 90% correct answers on the post-test).
3. By the end of our presentation on April 9th, 90% of those who attended will have a better understanding of the benefits of a rear-facing car seat (Aiming for 90% correct answers on the post-test).

Conclusion

Overall, the three interventions that we created were successful at increasing the knowledge and self-efficacy of parents and guardians in Coconino County. The attendees of the Car Seat Drive Thru Event successfully demonstrated an increased self-efficacy with installing car seats, while the attendees in the A Mother's Journey meeting during our presentation showed an increased knowledge of Car Seat Safety. Through this project, we were able to replace some car seats for parents with the help of Coconino County and North Country HealthCare. Furthermore, the car seat technicians were able to check a total of 11 car seats. We left some resources, like the Information Sheets and a copy of our presentation, for North Country HealthCare to utilize at future Car Seat Events. We hope that parents and guardians in Coconino County will continue to be educated on Car Seat Safety.

Acknowledgments

Thank you to North Country Healthcare for partnering with us on our capstone project. We appreciate Coconino County for supporting our car seat event and providing replacement seats. Thank you to Victoria Noenickx, Sydney Andresen, and Tenillya Cody for supervising our project and guiding us throughout the process, and to everyone who attended our car seat event and safety presentation. We're also grateful to the Colorado Plateau Center for Health Professions for funding our project, and to Kristan Konkell for giving us the knowledge to carry out our interventions.

References

Scan this QR code for references, photos, and project materials.

