



MAKING CONNECTIONS ACROSS SHARED RISK & PROTECTIVE FACTORS IN ALASKA



INDIVIDUALLY AND COLLECTIVELY LOOKING AT UPSTREAM APPROACHES FOR MOTOR VEHICLE SAFETY

Much of the early work on shared risk and protective factor (SRPF) approaches came out of the violence prevention community. CDC's seminal document, [Connecting the Dots](#), laid out the many shared factors across the different kinds of violence. Work identifying SRPF approaches in unintentional injury outcomes has been slower to emerge and are thus in a nascent stage.

After conducting a review of SRPF across six types of risky driving behavior, the Safe States Alliance developed the *Driver Behavior Change Seed Grant Program* to fund pilot projects in which states apply SRPF approaches to motor vehicle safety. [The Center for Safe Alaskans](#) (Safe Alaskans), previously known as the Alaska Injury Prevention Center, went through a strategic planning process five years earlier in which they reimagined themselves more broadly than just "injury prevention" to include wellness and safety as central to their work. Safe Alaskans is a grantee of the [Department of Transportation's Alaska Highway Safety Office](#). While transportation safety was primarily focused on enforcement in years past, Safe Alaskans has a strong interest in shifting the focus of their efforts towards prevention and behavior change models. The Center for Safe Alaskans received one of these grants and is using it to try out some very innovative approaches that are stretching the boundaries of traditional transportation safety efforts.

Several partners on the project team experienced organizational journeys that led them to reassess how they are approaching their safety efforts which in turn led them to work together on this project. Safe Alaskans had been introduced to SRPF approaches years before and had established an internal process by which they prioritized ideas and projects that affected SRPFs. While they did not have an exclusive focus on SRPFs, they were prioritizing efforts that could impact multiple injury outcomes. Then in September 2019, the Safe States Alliance published [Strategies to Address Shared Risk and Protective Factors in Driving](#), the document highlighting the findings from their



Project Partners

The Center for Safe Alaskans

A nonprofit committed to reducing injuries, promoting wellbeing and improving safety in Alaska and beyond

Alaska Injury Prevention Unit in the Division of Public Health

The state injury prevention program

Tribal Injury Prevention Program in the Alaska Native Tribal Health Consortium

A tribal injury and violence prevention program

Alaska State Violence and Injury Prevention Partnership

A statewide coalition of organizations working on injury and violence prevention

comprised of State, Tribal, and other organizations

SRPF Community of Practice--one of their active working groups

Alaska Center for Mindfulness

A nonprofit organization that offers courses in mindfulness, meditation, and yoga, including an 8 week class in mindfulness-based stress reduction

review of SRPF across risky driving behaviors. Safe Alaskans was thrilled to see evidence supporting mindfulness as a protective factor for both distracted and aggressive driving behaviors. This prompted them to pursue work on this protective factor in Alaska.



Primary partners in this project include the Division of Public Health, Injury Prevention Unit (IPU) and the Alaska Native Tribal Health Consortium (ANTHC) Injury Prevention Program. Leadership from all three organizations are active members of the Alaska State Violence and Injury Prevention Partnership (ASVIPP), a statewide coalition of 50/50 Tribal and non-tribal organizations. This large coalition has many working groups, one of which is the SRPF Community of Practice. Focused on SRPF approaches, this working group aligns with their other key partners in the desire to identify ways to apply upstream approaches to motor vehicle injury prevention efforts.

The State IPU and ANTHC partnered with Safe Alaskans in applying for the driver behavior change Seed Grant from Safe States to work broadly on mindfulness in transportation safety. In selecting this topic, they reached out to the Alaska Center for Mindfulness who agreed to partner with them in offering an established mindfulness training curriculum. The grant was awarded in February 2020. Due to the COVID-19 pandemic, this project didn't really get started until Fall 2020 when partners came together to identify how they wanted to apply the evidence-based strategy of mindfulness as a protective factor to the Seed Grant project.

DEVELOPING A PROGRAM PLAN

Once the partners were able to start meeting, they devoted the first six months to clarifying how to promote mindfulness among drivers and what populations to target with their initiative. While they were already six months behind on the grant because of the pandemic, this planning time could not be rushed. Getting everyone on the same page about what they should do and who they should work with ensured continued investment by all the partners and a shared vision for where they were headed.

After discussing other options (e.g., working with adults who have aggressive driving convictions, etc) the planning team decided to focus their mindfulness training on young drivers. This age group presented many advantages: they are still learning how to drive, they are especially prone to distraction and emotional dysregulation, they are in schools so are more easily reached, and they are taking driver's education courses. What's more, tribal youth are at especially high risk for motor vehicle crash injury. (Native American teens are also at increased risk for other injury and violence outcomes that have been shown to be helped by mindfulness training: suicide and substance abuse¹.) The team chose to target teens taking driver's education at two statewide boarding schools that serve Native Alaskan youth. These schools draw students from across the state and offer an opportunity to teach skills in two specific locations that might then impact communities statewide. The team's

Project Mission

"The ability to regulate your own emotions and distractions is key to being a safe driver. We are not taught how to do this, so we tend to react and can become more aggressive in our driving or speed. The more we can find calm within ourselves, the better drivers we will be. This training is an opportunity to develop those emotional and behavioral self-regulation skills through mindfulness."²

¹<https://www.cnay.org/suicide-prevention/#:~:text=In%20the%20United%20States%2C%20Native,higher%20than%20the%20national%20average;https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2682593>

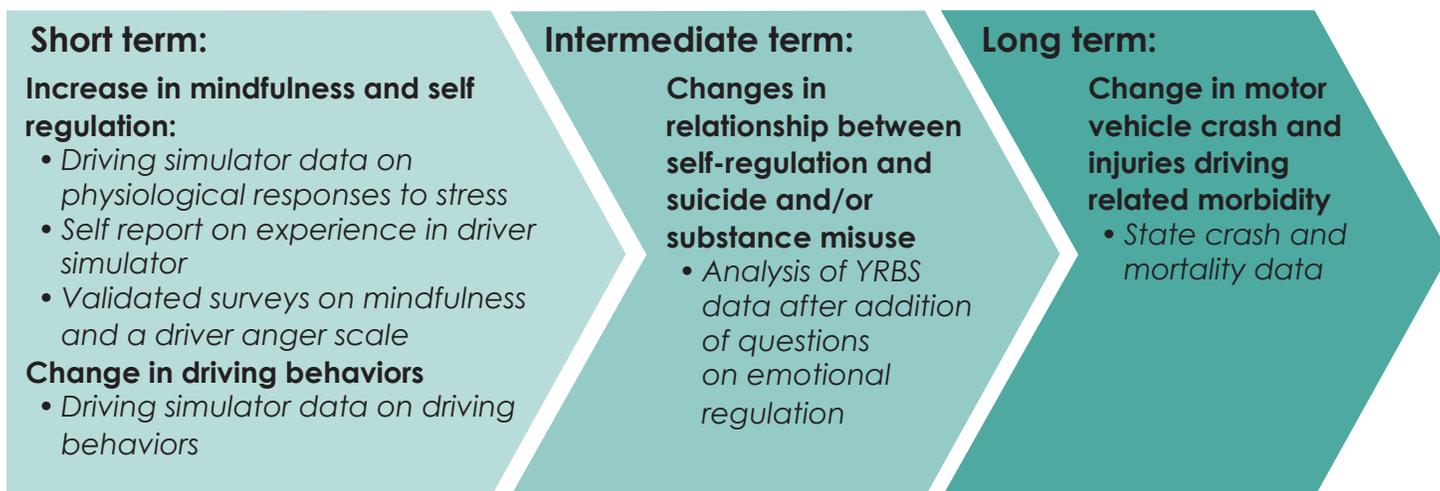
² All quotations are from discussions between state IVP practitioners/stakeholders and the Safe States Alliance that took place for the development of this case study.

newly developed relationship with the Alaska Center for Mindfulness allowed them to use an existing eight week intensive [curriculum](#) on mindfulness-based stress reduction that could be adapted for implementation with youth in driver's education classes.

The plan came into focus once the target population and training curriculum were identified. The third component to the plan included the use of a driver simulator and psychophysiology lab in which individuals conduct virtual driving simulations while connected to physiological monitors (e.g. heart rate, eye tracking, sweating of palms). At the time of this case study, the planning team was ready to implement the training and use the driving simulator with a driver's education class in each of two boarding schools. They will have the teens conduct driving simulations before and after the eight week mindfulness training. Scenarios that intentionally distract (e.g., a ball kicked into the road in front of the car) or aggravate (e.g., being cut off in

traffic or yelled at by the driver in another car) will be used to assess a student's capacity to maintain focus and calm while driving, both in terms of their physical responses to stressors and their driving behaviors. Teens will also complete a self report reflection on their experiences with the simulator and will complete a focus/mindfulness scale that has been validated for teens. Other outcomes they might assess include secondary analysis of motor vehicle crash and injury data. Being able to self-regulate in the face of stressors has been shown to reduce both distracted driving and aggressive driving/speeding behaviors. The planning team is also aware that these skills positively impact other injury outcomes that are particularly relevant to adolescents like suicide/self harm and substance misuse. They are working to include questions on self regulation and emotional regulation in the Youth Risk Behavior Survey in Alaska which will facilitate evaluation of the relationships to these other injury outcomes.

OUTCOMES



CHALLENGES: LANGUAGE

One of the biggest challenges for the team was getting collective buy-in on the idea of *mindfulness*. The partners in public health had research showing that mindfulness reduces aggressive and distracted driving so were excited to build on that research to promote an upstream approach to motor vehicle safety with the potential to positively impact other

injury outcomes. They know that public health funders identify what they are doing as a shared risk and protective factor approach, but did not need to talk about it this way with external partners. Partners in transportation safety were concerned about risky driving and increases in fatal crashes, but were less experienced with behavior change interventions and wary of something like mindfulness, which sounded too "New Age".

The team contacted an Australian transportation safety researcher whose findings on mindfulness in the Safe States report are what started the ball rolling in the first place. She had a doctoral student doing continued research on mindfulness and driver safety so the Alaska team was able to talk to someone actively doing research in the field they were attempting to influence. Getting research and language from these two researchers helped bridge the gap to the Alaska highway safety stakeholders.

Partners in education and schools already understood driver's education as within their purview and had adopted other approaches to promoting emotional regulation, but they see mindfulness as being about wellness or spirituality, not education. It was easy enough to use "emotional regulation" in conversations with them. The Tribal schools already had training in beading and drum making and understood those as being kinds of mindfulness practice, so using the term mindfulness was much less fraught with them. Partners from Alaska Native communities generally were more open to mindfulness, and saw it as consistent with their spiritual practices. Getting everyone to agree to pilot a curriculum developed at the Alaska Center for Mindfulness took extra work, but in the end was successful.

WHAT'S NEXT?

The curriculum is scheduled to be offered during driver's education classes at two boarding schools in Fall of 2021. The driving simulator will be taken to each school for pre-tests before the start of the class. Short term, intermediate, and long term outcomes, as described on the previous page, will be collected. The Alaska IPU included this work in their Core SIPP proposal; they've been awarded that funding from the CDC which will sustain the work on mindfulness and driving past the Seed Grant.

Regardless of the specific impacts of this intervention, the project has catalyzed relationships and conversations that are poised to shift approaches in multiple sectors. The [Healthy Alaskans 2030](#) Health Improvement Plan includes an objective on motor vehicle safety that specifically mentions mindfulness training as an action step to promote safe driving behaviors. The Alaska Highway Safety Strategic Plan will be updated soon and will reflect cross-cutting approaches such as this one. The director of Center for Safe Alaskans will be part of that planning process and will be specifically promoting the concept of mindfulness as a behavior change strategy that the Alaska Highway Safety should promote. The planning team also sees the inclusion of mindfulness training in a school based driver's education class as an opportunity to expand the norms in education about what is and is not considered appropriate topics for schools. While working across multiple sectors, the team is expanding the acceptance of mindfulness as an important skill for youth and adults, as a foundation for educational achievement as well as health, wellness, and safety.

Addressing Social Determinants of Health

- *Mindfulness as a promoter of emotional and physical health and safety*
- *Shifting educational systems to incorporate foundational life skills like mindfulness as part of what they teach youth*
- *Shifting transportation sector administrators and managers to understand how mindfulness and emotional regulation are behavior modification skills that can be a foundation of safer driving*



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