Effectiveness of tribe-driven interventions to improve child passenger safety: the Native Children Always Ride Safe study (Native CARS)

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**Introduction**

Native CARS is a community based participatory research study that aims to improve child safety seat use in six NW American Indian tribes. Three tribes implemented interventions from 2009-2011 and three tribes delayed interventions.

**Process**

Tribes used vehicle survey data and community member interviews to design & implement interventions.

**Did tribes who implemented interventions increase child safety seat use more than tribes who did not?**

<table>
<thead>
<tr>
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<th>Intervention tribes</th>
<th>Control Tribes</th>
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<tbody>
<tr>
<td>2009</td>
<td>41%</td>
<td>58%</td>
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<tr>
<td>2011</td>
<td>57%</td>
<td>64%</td>
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- Intervention tribes demonstrated a significant increase in proper child safety seat use compared to control tribes.
- 2.45 relative increase in odds of proper restraint for intervention tribes compared to 1.30 for control (p=0.005)
- 77% of American Indian drivers from intervention tribes reported receiving media interventions

**Define risks & themes**

- Booster-age children
- Unrestrained drivers
- Community norms
- Non-parent drivers
- Short trip
- No law
- Family rules
- Community responsibility for children
- On reservation/off reservation

**Generate intervention ideas**

- Awareness
- Policy
- Health Education
- Behavior change
- Public health/safety practice

**Review intervention ideas & materials**

- Community focus groups

**Refine Interventions**

**Implement interventions**

- Tribal Laws
- Tribe-specific media
- Community Education
- Professional training
- Certification
- Car Seat distribution
- Child safety seat clinics

**Evaluate Vehicle observations**

**Did intervention tribes sustain their efforts & improvements after active intervention phase?**

- Tribal child passenger safety law passed after active intervention period
- Child Passenger Safety Technicians remained employed & active at all three tribes
- Health education & community outreach activities continued at all three tribes

- The increase in proper restraint during active intervention period was sustained two years later
- The percentage of unrestrained children continued to decrease after active intervention period

**Funding & Partnership**

Native CARS is a research study funded by the National Center on Minority Health and Health Disparities and is partners with Northwest Portland Area Indian Health Board, Harborview Injury Prevention & Research Center, and six Northwest tribes.

**Conclusions**

Tribe-driven interventions based on community-specific data led to interventions that were well received and successful at improving child safety seat use. Tribes were able to sustain some of these efforts and improvements post intervention.