Child Passenger Safety Change Package
Cohort 2

Purpose

The child passenger safety change package includes: 1) an aim statement, 2) a driver diagram and 3) a measurement strategy for achieving the aim of reducing deaths, hospitalizations, and emergency department (ED) visits resulting from a motor vehicle crash in which the victim was an occupant of a vehicle and between the ages of 0 through 14.

The child passenger safety change package is intended to spread well-established evidence-based practices across a large number of pilot sites in states/jurisdictions. We expect the aim to be achieved if you are working across the entire driver diagram (e.g. all drivers, using multiple change ideas) and state/jurisdiction wide. If you are only working in selected areas of the driver diagram, we recommend that you strategically choose reinforcing drivers and change ideas to achieve the greatest impact and then revise your aim statement accordingly.

Aim

By May 2018, we will reduce deaths, hospitalizations, and emergency department visits resulting from a motor vehicle crash in which the victim was an occupant of a vehicle and between the ages of 0 and 14. Our goals are to:

1. Decrease the child passenger mortality rate by 4.17% relative to the state/jurisdiction baseline;
2. Decrease the rate of child passenger related hospitalizations by 4.17% relative to the state/jurisdiction baseline; and
3. Decrease the rate of child passenger related ED visits by 4.17% relative to the state/jurisdiction baseline.

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Driver Diagram

Primary Driver	Secondary Driver	Change Ideas	Recommended Measures
PD1: Societal Level Culture of child passenger safety	**SD1:** Knowledgeable partners and policy makers	1. Educate policymakers about evidence-based components of child passenger safety laws (see GHSA Child Passenger Safety Laws) and programs 2. Partner with communities and organizations to engage and participate in NHTSA's child passenger safety campaigns 3. Implement community-wide information and enhanced enforcement campaigns that utilize mass media and enforcement strategies to convince parents/caregivers to use child safety seats, booster seats, and seat belts 4. Use social media, blogs, and infographics (e.g., WHO multilingual infographics) to increase parents'/caregivers' understanding of child passenger safety	1, 6, 12
	SD2: Multi-stakeholder partnerships	1. Establish and expand child passenger safety coalitions that involve multiple stakeholders, including health care providers, home visitors, police, EMS, Healthy Start, WIC, health insurers/payers, and community organizations, etc. 2. Engage non-traditional partners (e.g., private sector) in child passenger safety efforts 3. Work with partners on adherence to and enforcement of child passenger safety laws 4. Ensure representation of child passenger safety technicians on Child Fatality Review teams 5. Create or update Memoranda of Understanding (MoUs) between stakeholders to increase clarity regarding roles and responsibilities for child passenger safety 6. Create or update a strategic and operational plan for the state/jurisdiction child passenger safety coalition	2, 11

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Primary Driver	Secondary Driver	Change Ideas	Recommended Measures
PD2: Organizational level Organizational policies and procedures support the culture and practice of child passenger safety	**SD1:** Knowledgeable and proactive child passenger safety practitioners	1. Educate law enforcement officers about evidence-based components of child passenger safety laws (see GHSA Child Passenger Safety Laws) and effective strategies for enforcing those laws 2. Implement child passenger safety education protocols within state public health programs (e.g., WIC) 3. Implement child passenger safety education protocols within hospitals and community health centers 4. Include prompts for health care providers and social service professionals in paper or electronic health records, especially for children ages 0 through 14, to give anticipatory guidance on child passenger safety	2, 3, 4, 5, 6
	SD2: Expanded and coordinated network of child passenger safety technicians, fitting stations, and sites for distribution of child safety seats	1. Maintain an optimal number of child passenger safety technicians with up-to-date certifications (e.g., Safe Kids Worldwide, National Child Passenger Certification Training Program) 2. Establish mobile fitting stations and car seat inspection stations to ensure car seats are properly installed 3. Establish sites (e.g., local health departments, hospitals, community health centers, social service agencies) that distribute free or discounted child safety seats and booster seats to parents/caregivers 4. Distribute free or low-cost child safety seats and booster seats to parents/caregivers in high risk and underserved populations 5. Create a standard state-wide process for collecting and tracking a universal inspection form	6, 7, 8, 9, 10, 13, 14

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Primary Driver	Secondary Driver	Change Ideas	Recommended Measures
PD3: Relational/ Individual level Families knowledgeable in and adhering to child passenger safety best practices	**SD1:** Child passenger safety education and program delivery provided by health care and social service professionals	1. Implement child passenger safety education programs that include pledge cards and incentives, such as coupons and small prizes donated by businesses 2. Child passenger safety technicians/educators use teach back approaches/supervised practice to teach families how to adjust seat, buckle harness, install and protect their child and get family sign off 3. Engage health care providers and social service professionals (e.g., physicians, social workers, home visitors, etc.) in giving anticipatory guidance on child passenger safety at wellness visits, counseling encounters, and home visits, through brief educational interventions that promote child passenger safety knowledge (e.g., written checklists, such as Safe Kids Worldwide Basic Car Seat Safety checklist, American Academy of Pediatrics guidelines, etc.) 4. Provide child passenger safety education to parents/caregivers to reduce premature graduation of children ages 0 through 12 to restraints that are inappropriate for their height and weight 5. Provide child passenger safety education to parents/caregivers that targets kids ages 8 through 14 using materials such as those available at: NHTSA's Parents Central website	2, 3, 4, 6
	SD2: Culturally competent child passenger safety education provided to high risk populations	1. Conduct outreach to high risk populations, including African American, Hispanic, Native American, and rural parents/caregivers who report lower use of child safety seats and booster seats 2. Child passenger safety technicians/educators use teach back approaches/supervised practice to teach high risk populations how to adjust seat, buckle harness, install and protect their child and get family sign off 3. Distribute written child passenger safety educational materials in multiple languages to parents/caregivers	2, 4, 6

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Measurement Strategy

Select the measures that will give you the best indication of signals of improvement from working on your drivers and change ideas. Your state/jurisdiction is encouraged to choose up to 5 - 7 (or more if needed) measures. More than one change idea may be necessary to move a given measure. We encourage all CS CoIIN states/jurisdictions to report on the 3 state/jurisdiction outcome measures, monthly or quarterly, and to explore the ability to collect data that is more current.

Note: The measurement strategy does not include a specific measure for each change idea. When selecting measures, consider the set of change ideas that will be necessary to move a measure. This may include change ideas that don't have a "recommended measure" listed in the driver diagram. If you opt to add a measure or would like guidance on selecting measures, please contact CSN for technical assistance.

State/Jurisdiction Outcome Measures	Process Measures
- Rate of child passenger related fatalities - Rate of child passenger related hospitalizations - Rate of child passenger related ED visits	1. Percent of communities that participate in campaign 2. Percent of organizations engaged to implement protocols for providing child passenger safety education 3. Percent of health care organizations that give anticipatory guidance to caregivers on child passenger safety 4. Percent of health and social service professionals educating caregivers on child passenger safety 5. Percent of health care organizations with prompts in health records to provide child passenger safety education 6. Percent of motor vehicles with child passengers properly restrained 7. Number of sites operating mobile fitting and car seat inspection stations 8. Percent of sites operating mobile fitting and car seat inspection stations in high risk communities 9. Number of free or discounted child safety seats distributed to caregivers 10. Number of car seat technicians currently certified 11. Number of organizations actively participating in the state/jurisdiction child passenger safety coalition 12. Percent of policymakers educated on EB components of child passenger safety laws and programs 13. Number of universal safety seat inspection forms completed and submitted by child passenger safety certified technicians 14. Number of free child safety seat inspection events conducted statewide.

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State/Jurisdiction Outcome Measures

Measure	Numerator	Denominator	Data Collection Methods	Reporting Frequency
Rate of child passenger related fatalities	Total number of child passenger related deaths among children ages 0 through 14	Population of children ages 0 through 14 over the same time period	Work with state epidemiologist, using the Child Passenger Safety Outcome Data Worksheet	Monthly or Quarterly depending upon what is feasible for your state/jurisdiction
Rate of child passenger related hospitalizations	Total number of child passenger related hospitalizations among children ages 0 through 14	Population of children ages 0 through 14 over the same time period	Work with state epidemiologist, using the Child Passenger Safety Outcome Data Worksheet	Monthly or Quarterly depending upon what is feasible for your state/jurisdiction
Rate of child passenger related ED visits	Total number of child passenger related ED visits among children ages 0 through 14	Population of children ages 0 through 14 over the same time period	Work with state epidemiologist, using the Child Passenger Safety Outcome Data Worksheet	Monthly or Quarterly depending upon what is feasible for your state/jurisdiction

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Process Measures

Note: Review the data collection column for guidance on operationalizing process measures. You may need to conduct assessments or administer questionnaires to determine your population of interest.

Measure	Numerator / Denominator	Data Collection	Reporting Frequency
1. **Percent of communities that participate in campaign**	**Numerator:** Aggregate number of communities that participate in campaign **Denominator:** Total number of communities in the population of interest	Define the population of interest. Define "participate." Track the aggregate number of communities in the population of interest that participate in the campaign. Additional data you may find useful to track: Number and type of sites/organizations in your communities.	Monthly
2. **Percent of organizations engaged to implement protocols for providing child passenger safety education**	**Numerator:** Aggregate number of organizations engaged to implement protocols for providing child passenger safety education **Denominator:** Total number of organizations in the population of interest	Define the population of interest. Define "engaged to implement protocols." Track the aggregate number of organizations in the population of interest engaged to implement protocols for providing child passenger safety education.	Monthly
3. **Percent of health care organizations that give anticipatory guidance to caregivers on child passenger safety**	**Numerator:** Aggregate number of health care organizations that give anticipatory guidance to caregivers on child passenger safety **Denominator:** Total number of health care organizations in the population of interest	Define the population of interest. Define "give anticipatory guidance." Track the aggregate number of health care organizations in the population of interest that provide anticipatory guidance on child passenger safety. Additional data you may find useful to track: Type of health care organization.	Monthly

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Measure	Numerator / Denominator	Data Collection	Reporting Frequency
4. Percent of health and social service professionals educating caregivers on child passenger safety	**Numerator:** Aggregate number of health and social service professionals that educate caregivers on child passenger safety **Denominator:** Total number of health and social service professionals in the population of interest	Define the population of interest. Define "educate." Track the aggregate number of health and social service professionals in the population of interest that provide education to caregivers on child passenger safety.	Monthly
5. Percent of health care organizations with prompts in health records to provide child passenger safety education	**Numerator:** Aggregate number of health care organizations with prompts in health records to provide child passenger safety education **Denominator:** Total number of health care organizations in the population of interest	Define the population of interest. Track the aggregate number of health care organizations in the population of interest with prompts in health records to provide child passenger safety education. Additional data you may find useful to track: Type of prompts provided at each health care organization.	Monthly
6. Percent of motor vehicles with child passengers properly restrained	**Numerator:** Number of motor vehicles with child passengers properly restrained **Denominator:** Total number of motor vehicles with child passengers in the population of interest	Recommendation is to collect data when there is a moving vehicle traffic violation and there is a child passenger in the car. Work with law enforcement to pilot this in the community and track samples of 20 over time. Alternative approach is to conduct an observational study. Determine when and where you will do this.	Quarterly
7. Number of sites operating mobile fitting and car seat inspection stations	N/A	Define where you are working in your state or jurisdiction. Track the aggregate number of sites operating mobile fitting and car seat inspection stations. Note: It is recommended to define a goal for this measure. Additional data you may find useful to track: Number of car seat inspections performed at each site.	Monthly

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Measure	Numerator / Denominator	Data Collection	Reporting Frequency
8. **Percent of sites operating mobile fitting and car seat inspection stations in high risk communities**	**Numerator:** Aggregate number of sites operating mobile fitting and car seat inspection stations in high risk communities **Denominator:** Total number of sites in the population of interest	Define the population of interest. Track the aggregate number of sites operating mobile fitting and car seat inspection stations in high risk communities in the population of interest. Additional data you may find useful to track: Number of free child safety seats distributed at each site; number of discounted child safety seats distributed at each site.	Monthly
9. **Number of free or discounted child safety seats distributed to caregivers**	N/A	Define where you are working in your state or jurisdiction. Track the aggregate number of free or discounted child safety seats distributed to caregivers. Note: It is recommended to define a goal for this measure. Additional data you may find useful to track: Number of sites distributing free or discounted child safety seats to caregivers; number of child safety seats distributed at each site.	Monthly
10. **Number of car seat technicians currently certified**	N/A	Define where you are working in your state or jurisdiction. Track the aggregate number of individuals who successfully complete training and receive certification as car seat technicians. Note: It is recommended to define a goal for this measure. Additional data you may find useful to track: Number of individuals participating in car seat technician training; Number of active car seat technicians (e.g., number of car seat technicians who are certified and conduct a specified number of inspections per month).	Monthly

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Measure	Numerator / Denominator	Data Collection	Reporting Frequency
11. **Number of organizations actively participating in the state/jurisdiction child passenger safety coalition**	N/A	Define "actively participating." Track the aggregate number of organizations actively participating in the state/jurisdiction child passenger safety coalition. Note: It is recommended to define a goal for this measure. Additional data you may find useful to track: Type of organization; number of Memoranda of Understanding developed and signed.	Monthly
12. **Percent of policymakers educated on EB components of child passenger safety laws and programs**	**Numerator**: Aggregate number of policymakers educated on EB components of child passenger safety laws and programs **Denominator**: Number of policymakers in the population of interest	Define the population of interest. Define "educated." Track the aggregate number of policymakers educated on evidence-based (EB) components of child passenger safety laws and effective strategies for enforcing those laws in the population of interest. Additional data you may find useful to track: Number and type of interactions with policymakers.	Monthly
13. **Number of universal safety seat inspection forms completed and submitted by child passenger safety certified technicians**	N/A	Track the aggregate number of universal safety seat inspection forms completed and submitted by CPS certified technicians. Note: It is recommended to define a goal for this measure. Additional data you may find useful to track: Number of forms completed and submitted at each site; number of inspections at each site.	Monthly
14. **Number of free child safety seat inspection events conducted statewide**	N/A	Track the aggregate number of free child safety seat inspection events conducted statewide. Note: It is recommended to define a goal for this measure. Additional data you may find useful to track: Location of inspection events; number of attendees.	Monthly

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References and Resources

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