CDC and Transportation Safety

- CDC mission:
  Protect public health and safety through control and prevention of disease, injury, and disability
- Motor vehicle crashes are a leading cause of death in the US; therefore, has been a CDC priority

Working together, we can help keep people safe on the road—every day.
Child Safety Seat Use

- 2014, age 12 years and younger:
  - 602 deaths
  - 34% not buckled up
  - 121,350 injured

- CDC study: ages 0-12:
  - 618,000 children did not use child safety seat or booster seat or a seat belt at least some of the time


The Public Health Approach to Prevention

Assess the Problem
- What's the problem?

Identify the Causes
- Why did it happen?

Develop & Evaluate Programs & Policies
- What works?

Implementation & Dissemination
- How do you do it?

Why Evaluate?

- Did I do what I set out to do and did it make a difference?
- Were program objectives accomplished?
- Market the program.
- Increase future program effectiveness.
**Stages of Evaluation**

- Baseline Data Collection Project
- Implementation
- Formative Evaluation
- Process Evaluation
- Timely Feedback
- Pre-Testing

**Changes in the Target Audience**
- Impact Evaluation
- Monitoring
- Outcome Evaluation
- Long-term: Health Outcomes
- Short-term: Knowledge, Attitudes & Practice

**When to Evaluate?**
- While the program is being developed
- Begins when program idea is conceived
- Most effective when integrated into program

**What to Evaluate?**
- Formative Evaluation: Assess strengths/weaknesses
- Process Evaluation: Measure efforts and direct output
- Impact Evaluation: Community-level change
- Outcome Evaluation: Effect & long-term changes
CDC Framework for Program Evaluation

1. Engage stakeholders
2. Describe the program
3. Focus on the evaluation design
4. Gather credible evidence
5. Justify conclusions
6. Ensure use and share lessons learned

http://www.cdc.gov/eval/steps/index.htm

Engage Stakeholders

- Who are key stakeholders?
- What role in evaluation?
- How will stakeholders be engaged?
- When to engage stakeholders?

Describe the Program

- What activities will be implemented?
- What outcomes do you hope to achieve?
Focus on Evaluation design

- Assess Stakeholder Needs
- Develop Evaluation Questions
- Consider Available Resources

Gather Credible Evidence

- Process/Implementation Data
  - Answers "are we putting our program in place well/how we intended?"
  - Information gathered can be used for improving how the program is delivered

Gather Credible Evidence

- Example Measures and Data Sources
  - Number of child seat installation trainings delivered (data source: training logs)
  - Number of sites implementing child safety seat installations (data source: MOUs)
  - Number of individuals provided child safety seats (data source: service logs)
  - Staff attitudes/enthusiasm/confidence in their ability to correctly install and educate parents on child safety seats (data source: staff survey)
  - Public perceptions/attitudes towards child safety seat installations (data sources: participant survey; media/news coverage)
  - Challenges to successful implementation (data source: service logs)
Gather Credible Evidence

Outcome/Impact Data

- Answers “Is our program having the impact we want?”
- Information gathered can be used to demonstrate your program’s outcomes and impact

Example Measures and Data Sources

- Change in percent of children using booster seats (survey)
- Change in number of properly installed child safety seats (service logs)
- Change in citations for unrestrained children (law enforcement logs)
- Change in rate of emergency room visits due to motor vehicle injury (ER logs)
- Change in rate of hospital visits due to motor vehicle injury (hospital discharge, trauma registry reports)
- Change in deaths from motor vehicle injury (state reports, CDC WISQARS)

Justify Conclusions

- Analysis
  - How will data be analyzed?
  - Who will be responsible for analysis?
  - How often will data be analyzed?
- Interpretation
  - Who will you involve in drawing, interpreting, and justifying conclusions?
  - What are your plans to involve them in this process?
Ensure Use and Share Lessons Learned

<table>
<thead>
<tr>
<th>Evaluation Findings</th>
<th>Data Dissemination and Use</th>
<th>Intended Audience</th>
<th>Goals/Intended Use</th>
<th>Person Responsible</th>
<th>Time Line/Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Child safety seat program serving 50% more families than expected, and running out of seats to give to participants.</td>
<td>Example: Use data to communicate programmatic need to leaders/those who can access more resources.</td>
<td>State legislators</td>
<td>Use data to communicate programmatic need (more helmets) to leaders/those who can access more resources.</td>
<td>John Doe</td>
<td>June 1, 2017</td>
</tr>
<tr>
<td>Example: Total hospitalization for Motor Vehicle-related injuries have decreased by 20% since implementing child safety seat program.</td>
<td>Example: Use data to communicate program/policy success to state legislators.</td>
<td>School superintendents</td>
<td>Use data to communicate program/policy success and encourage continued implementation in schools.</td>
<td>Jane Doe</td>
<td>Mar 5, 2017</td>
</tr>
</tbody>
</table>

Making an Evaluation Plan

<table>
<thead>
<tr>
<th>When are goals met?</th>
<th>How often are goals met?</th>
<th>Who will do what?</th>
<th>What tools you will use?</th>
<th>Who to report to/who else will be affected?</th>
<th>How you will use results?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metrics</td>
<td>Daily</td>
<td>Leadership</td>
<td>Leadership</td>
<td>Leadership</td>
<td></td>
</tr>
<tr>
<td>Responses</td>
<td>Weekly</td>
<td>Partners</td>
<td>Community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term and long-term measures</td>
<td>Monthly</td>
<td>By event</td>
<td>By event</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quarterly</td>
<td>Monthly</td>
<td>Quarterly</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annually</td>
<td>Annually</td>
<td>Annually</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation Resources

- CDC's Framework for Program Evaluation
  http://www.cdc.gov/eval/framework/index.htm
- Introduction to Program Evaluation: A Self-Study Guide
  http://www.cdc.gov/eval/guide/index.htm
- Practical Evaluation Using the CDC Evaluation Framework — A Webinar Series (CDC - National Asthma Control Program)
  http://www.cdc.gov/asthma/program_eval/evaluation_webinar.htm
- EvaluACTION (CDC - Division of Violence Prevention)
  http://www.cdc.gov/violenceprevention/apps/evaluaction/
- Program Evaluation Briefs (CDC - Division of Adolescent and School Health)
  http://www.cdc.gov/healthyschools/evaluation/evaluation_briefs.htm
- Policy Evaluation Briefs (CDC - National Center for Injury Prevention and Control)
  http://www.cdc.gov/ncicp/Publications/PolicyEvaluationBriefs.html