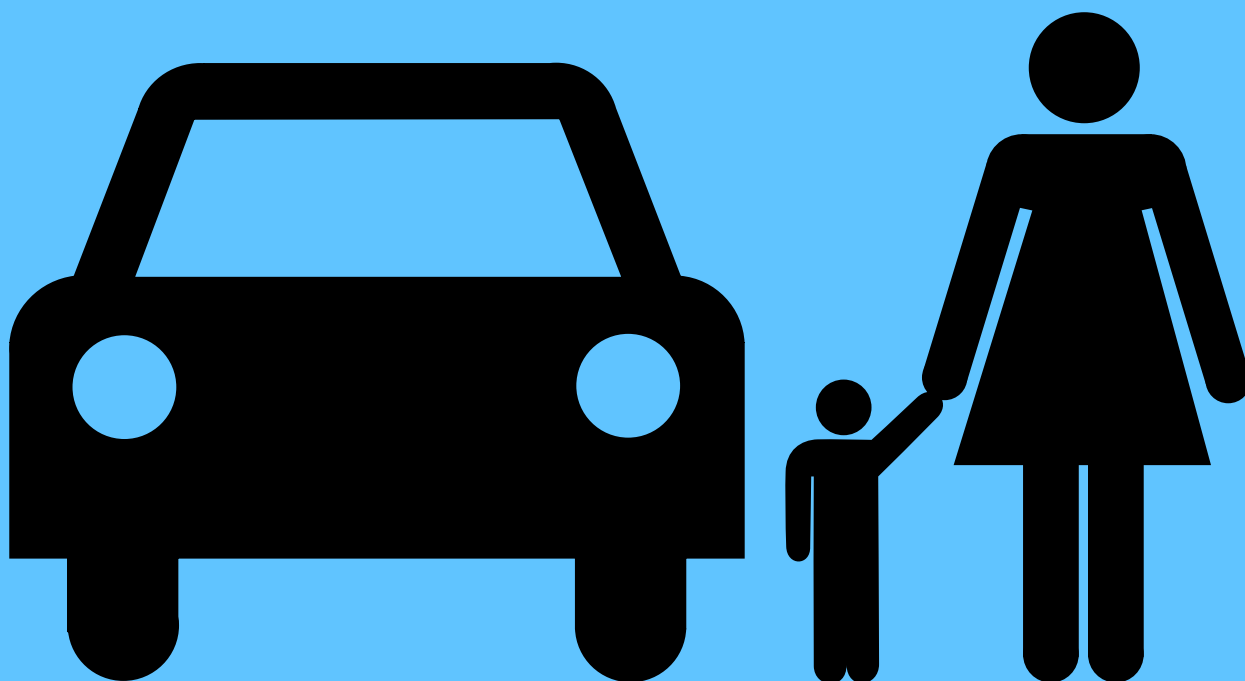


# Guidelines

for Developing Educational Materials  
to Address

## Children Unattended in Vehicles



# The Project and Authors

“*Guidelines for Developing Educational Materials to Address Children Unattended in Vehicles*” lays out a process to develop effective educational materials that take into account communication theory. This document is designed for organizations to help prevent children from being left unattended in vehicles and heat injuries that can result from this situation. As with the prevention of any injury, educational strategies work best when they are part of a sustained program addressing a source of injury and when they are combined with legislative and policy measures that facilitate changes in behavior.

While these guidelines are tailored to heat-related injuries, the principles can be applied more generally to address other dangers children face when unattended in vehicles.

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## Acknowledgments

The guidelines were modeled on *Guidelines for developing traffic safety educational materials for Spanish-speaking audiences*. (2006). Educación de seguridad en el tránsito/Education in Traffic Safety project, Newton, MA: EDC, Inc.

The project was made possible through an Applied Learning Experience of a candidate for the Master of Science in Health Communication program at the Tufts University School of Medicine.

## Suggested Citation

Babcock-Dunning, L., Guard, A., Gallagher, S.S., Streit-Kaplan, E. (2008) *Guidelines for Developing Educational Materials to Address Children Unattended in Vehicles*. Newton, MA: Health and Human Development Programs, EDC, Inc.

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# Executive Summary

No one knows how frequently children are left unattended in vehicles, but each year, several dozen young children across the U.S. die in parked motor vehicles from heat-related causes. There is no typical family affected by these tragedies. They occur to children whose parents work in fast-food restaurants and who are executives. They affect two-parent families, and those in which a parent is in jail or deployed overseas. Many of the children were strapped in their child safety seats when they died, indicating that parents were compliant with laws intended to protect their children.

**There is no typical family affected by these tragedies. They occur to children whose parents work in fast-food restaurants and who are executives.**

Increased media attention, advocacy efforts and changes in state laws have led to many efforts to address this dangerous situation through creating and promoting educational and outreach materials. However, little to no effort has been made to evaluate these materials or to create guidelines to assist in producing effective, accurate and reliable materials.

We identified and collected existing print materials that focus on children left in vehicles and assessed the strategies used to develop them. We then linked this information with research-based health communication theories to develop guidelines. The guidelines cover ten steps in three phases:

## **I. Before you develop the content**

Step 1: Understand your audience

Step 2: Plan to evaluate

Step 3: Identify key partners

## **II. Developing the message and content**

Step 4: Communicate your message

Step 5: Develop the content based on facts

Step 6: Use clear and simple language

Step 7: Generate images

Step 8: Solicit feedback

## **III. Distributing the material and assessing its impact**

Step 9: Develop a distribution plan

Step 10: Assess the material's impact

In addition to serving as a development tool, the outlined steps and criteria are helpful in deciding whether existing materials are appropriate or if your organization is better served by developing its own material. Developing materials with partners can result in accurate messages that are acceptable to the audience and presented well. Partners can help identify distribution methods and may assist in disseminating the message more broadly, and less expensively. Experts on child safety and child welfare, including pediatricians, childcare leaders, child protection agency directors, parent educators and child passenger safety experts are all potential partners for developing and disseminating your materials. We encourage you to share this guide with them.

# Introduction

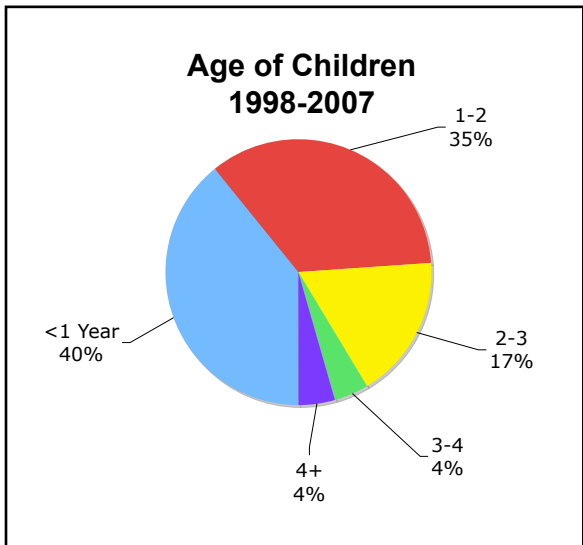
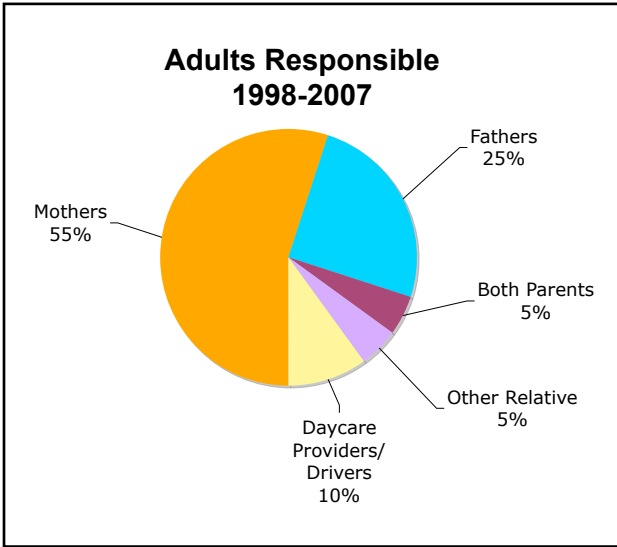
## Background on the problem

Each year, several dozen young children across the U.S. die in parked motor vehicles from heat-related causes. No one knows how frequently children are left unattended in vehicles. Increased media attention, advocacy efforts and changes in state laws have led to many efforts to address this dangerous situation through creating and promoting educational and outreach materials. However, little to no effort has been made to evaluate these campaigns or to create guidelines to assist in producing effective and reliable materials.

## What do we know about the problem?

We analyzed 255 heat-related deaths to children in parked motor vehicles over ten years (1998-2007). Almost all children were aged four years or younger. Deaths occurred in 46 states, and although most happened on hot days, some deaths occurred on days that adults may have thought were not hot enough to cause harm.

There is no typical family affected by these tragedies. They occurred to children whose parents worked in fast-food restaurants, who were business owners, and who were physicians. They affected two-parent families, and those in which a parent was in jail or deployed overseas. Many of the children were strapped in their child safety seats when they died, indicating that parents were compliant with laws intended to protect their children.



## What are the patterns?

Over ten years, 20% of children climbed into an unlocked car to **play** and were unable to get out; 9% were overlooked by paid **daycare providers** or van drivers; and 22% were left by parents who **forgot to drop a sleeping child at daycare** and went to work instead. It is worth noting that a proactive call-in policy with childcare providers might have prevented these 55 deaths. Twelve percent of children were **left deliberately** by adults, in order to run errands, to let the child sleep, or occasionally, as a substitute for childcare. Another 22% were **forgotten or overlooked** by the adults transporting them, often with a change in routine or other distractions. The remaining 15% of cases are unclear.

2007 was a fairly typical year: 23 heat-related deaths occurred to children aged 4 and under in 22 separate incidents from March through October in 19 different states. Although we found greater numbers of heat-related deaths to children in other years (as many as 35 confirmed in 2003), the patterns are consistent from year to year in terms of gender, ages, and circumstances that lead to these tragedies.

## Circumstances in 2007

- **Playing:** Two children climbed into the car to play on hot days; no one noticed they had left the home.
- **Daycare:** Two children were overlooked by daycare providers or drivers.
- **On the way to work:** Half of the adult-involved incidents occurred when the parents forgot to drop the child at childcare and went to work instead, not finding the child until the end of the workday.
- **Intent:** Of the children left by adults, three were left knowingly (two of them were siblings, left by a parent while she worked). Three others forgot the child but not while working.
- **Criminal charges:** Criminal charges were filed against 12 adults.
- **Confusion:** In four incidents, there were multiple children present; in three others, a change in routine or unusual confusion contributed to the child being left behind.

## What is included in existing materials?

Since publication of a research article in the journal *Injury Prevention* in 2005 (Guard & Gallagher), many child health and advocacy agencies and organizations have developed or adapted existing materials intended to inform the public about heat-related deaths to children unattended in parked cars. To our knowledge, guidance documents are not available to help assure developers of the accuracy, efficacy, effectiveness or impact of these print materials. We identified and collected existing print materials that focus on children left in vehicles and assessed the strategies used to develop them. We then linked this information with research-based health communication theories to develop these guidelines. Because there is so little published on communication practices specific to preventing injuries, important first steps were to develop a picture of the current initiatives addressing this issue, and to determine whether any of these existing initiatives could help form a basis for guidelines.

## How have materials been developed?

In early 2007, we invited injury prevention and child safety practitioners from across the country who might have developed, used and/or disseminated print materials on the risks to unattended children in vehicles to participate in an internet-based survey. The survey items included questions about the target audience(s), content development processes, dissemination methods, and evaluation practices. Sixty-six of the 88 practitioners who responded to our initial invitation to participate were ineligible because their organizations had no materials addressing this issue. Among eligible respondents, most practitioners used content that already existed. The most common source for content was parent advocacy groups (68%), with few respondents consulting or referencing existing published literature or any public health source. Print materials were primarily in the form of pamphlets but also included stickers, fliers, posters and postcards. Only four of 22 respondents said they had evaluated their materials. Ninety-five percent of respondents indicated interest in having guidelines available to them for future use.

**Only four of 22 respondents said they had evaluated their materials. Ninety-five percent of respondents indicated interest in having guidelines available to them for future use.**

## Content of materials:

We examined 18 existing brochures and pamphlets and found that 50 percent identified *both actions* caregivers could take to protect their children *and risks* associated with leaving children alone in a car, while 22 percent of materials did not include any specific prevention strategy. The remainder employed action or risk strategies in isolation. Although many states (13 as of May 2008) have passed laws or are considering legislation to prohibit adults from leaving children unattended in vehicles, none of the materials mentioned the *legal consequences* of leaving a child

alone in a vehicle. We did not identify any materials that had been evaluated adequately to form a model for future initiatives.

## A snapshot of the guidelines

These guidelines are modeled on an existing document: *Guidelines for developing traffic safety educational materials for Spanish-speaking audiences*. They cover three phases in ten steps:

### I. Before you develop the content

- Step 1: Understand your audience
- Step 2: Plan to evaluate
- Step 3: Identify key partners

### II. Developing the message and content

- Step 4: Communicate your message
- Step 5: Develop the content based on facts
- Step 6: Use clear and simple language
- Step 7: Generate images
- Step 8: Solicit feedback

### III. Distributing the material and assessing its impact

- Step 9: Develop a distribution plan
- Step 10: Assess the material's impact

The more steps you follow, the more likely the resulting materials will resonate with your audience and affect their knowledge, attitudes, and behaviors. In addition to serving as a development tool, the outlined steps and criteria are helpful in deciding whether existing materials are appropriate or if your organization is better served by developing its own material. Consider working with other groups, sharing materials, evaluating existing materials, or adapting these for particular uses. Whatever your decision, a high-quality, tested material that resonates with your intended audience is likely to be the best investment of your resources.

**The more steps you follow, the more likely the resulting materials will resonate with your audience and affect their knowledge, attitudes, and behaviors.**

Experts on child safety and child welfare, including pediatricians, childcare leaders, child protection agency directors, parent educators and child passenger safety experts are all potential partners for developing and disseminating your materials. We encourage you to share this guide with them.

## What educational materials can and cannot do

Communication strategies are only one way of addressing the prevention of heat-related risks to children unattended in parked cars. The most successful injury prevention approaches typically combine **education** (e.g., materials), **engineering** (e.g., a warning alarm or reminder sticker on dashboard) and **policy or legislative strategies** (e.g., child care call-in policy, state law). For more detailed information, see *Making Health Communication Programs Work* in the Resources section.

### **A stand alone communications approach can**

- Increase knowledge and awareness of an issue and possible solutions
- Demonstrate or illustrate appropriate skills and behaviors
- Influence perceptions, beliefs, and attitudes in ways that may change social norms
- Spur action
- Refute myths and misconceptions

### **Communication combined with other strategies can:**

- Create sustained change when individuals adopt and maintain the behaviors
- Overcome barriers or systemic problems. For example:
  - o develop daycare policies to address the issue,
  - o fund education initiatives directed at parents and caregivers,
  - o train first responders to search family vehicles for missing children,
  - o enforce laws regarding children left in vehicles,
  - o create a community norm that leaving children alone is unacceptable.

# The Guidelines

## I. Before you develop the content

Get to know your audience, identify key partners who can help with material development, and start planning how to evaluate material **before** you create it.

### Step 1: Understand your audience

Knowledge of your audience will inform all aspects of the materials development process. To communicate effectively with audiences large or small, you need to understand their demographics (e.g., age, gender, reading ability) and preferences for receiving health-related messages. You will want to tailor the message to current levels of understanding and needs, making the best use possible of your time and resources.

#### Consider

- Conducting background research
- Looking at a variety of data
- Talking with members of the target audience.

#### Understand Your Audience's Demographics

Think through the impact that demographic factors may have on your message. You will need to understand the educational level, cultural background, socioeconomic status, and literacy levels of your intended audience to help fine tune your message. For example, messages for low-income families may include information on low-cost or free services. If your audience is from a particular cultural group, familiarize yourself with aspects of this culture that may be pertinent to your message. If extended families have a major role in childcare, reach out to other family members in addition to the parents with your message.

**You will need to understand the educational level, cultural background, socioeconomic status, and literacy levels of your intended audience to help fine tune your message.**

#### Understand How Your Audience Prefers to Receive Health Information

Not everyone likes to access health-related information in the same way. Understanding how your audience prefers to receive information (e.g., library, medical provider, website) will help you plan who to partner with and how to distribute material. Here are some factors to consider:

#### Trusted Messengers

Talking with your target audience will help you determine whom they most trust so you can choose the best messengers to deliver information. Try to partner with credible people or groups. Is it more effective to have a member of the clergy, a pediatrician, a teacher, or a community health educator delivering your message? For example, if a community has tense relations with law enforcement, having a police officer as the spokesperson for your PSA may damage your credibility.

#### Existing Networks

Think about where your audience lives, works, and socializes, and the services they currently use. If you are targeting parents of children ages one through four for a campaign: Do the children attend daycare or preschool programs? Does the target audience shop at particular stores? Are the parents members of certain community organizations? Try to partner with these organizations to distribute materials or host events to publicize your program.

## Step 2: Plan to Evaluate

Evaluation usually is addressed at the end of guidance documents, but thinking about evaluation from the very beginning of the development process is a more effective approach. You will be able to identify your audience's mindset on the issue or which strategies are or aren't working early on, and make adjustments accordingly, saving you both time and effort.

The type of evaluation you choose will depend on your resources, staff availability, and overall goals in developing and distributing the material. In general, there are three types of evaluation which can be used when developing materials:

**The type of evaluation you choose will depend on your resources, staff availability, and overall goals in developing and distributing the material.**

### Formative Evaluation

Formative evaluation encourages you to pre-test your materials to learn the likely responses of both the intended audience and messengers, before you invest further. It helps to ensure that the message being conveyed is understandable and acceptable to the target audience and is meeting its needs. For example,

- Will daycare providers be willing to distribute materials you develop for parents?
- Do members of the target audience already know about the problem, but do not believe it is relevant to them?
- Does the audience feel that the material comes from a credible source?

### Process Evaluation

Process evaluation assesses how materials are being distributed and whether they are reaching the targeted audience. It helps determine what percentage of the intended audience actually receives materials. Is it more or less than expected?

Some questions to ask when conducting a process evaluation include:

- Is the material available at locations accessible to the target audience?
- How many and what types of sites distribute your material (e.g., schools, health care providers, library story hours, auto dealers)?
- How many units of the material have been distributed?
- Have you received requests for more materials? How many?

### Impact Evaluation

Impact evaluation assesses a desired change in the knowledge, attitudes, or behavior of the target audience. For example, is there an increase in the number of parents who know that it is illegal to leave a child alone in a vehicle? Are daycare providers adopting call policies for absent children? Pamphlets and brochures will probably have only a modest impact if they are used alone rather than as part of a larger campaign. While print materials alone may not lead to measurable changes in behavior or longer-term reduction in injuries, they can affect short-term changes in knowledge. If materials are part of a larger program targeting a specific community, an impact evaluation might be able to assess the effects of several different components of the program.

## Some questions to ask when conducting an impact evaluation might include

- Is the family car locked when it is parked in the driveway?
- Have participants talked to their partners or other family members about the issue?
- Has new information been learned about the causes of heat injury or about prevention steps that can be taken?
- Did they learn about new contacts or resources?
- Have attitudes changed about leaving a child alone in a car?
- Do they report their intention to change their behavior (e.g., put their keys out of reach or to no longer leave their child alone in the car when they run errands)?

## Step 3: Identify key partners

Developing materials with partners can help to assure that messages are accurate, acceptable to the audience, and presented well. Partners can help identify dissemination methods and may assist you in disseminating the message more broadly, and less expensively.

### Who should you partner with?

Experts on child safety and child welfare, such as pediatricians, childcare leaders, child protection agency directors, parent educators and child passenger safety experts are all potential partners for developing and disseminating your materials. Consider partnering with your [state maternal and child health agency](#), [injury prevention programs](#), child welfare agencies, children's hospitals, child care regulators, associations of child care providers, Head Start programs, university programs that train early childhood educators and [traffic safety programs](#).

Experts in health communication can provide guidance in the best ways to present your message factually and in ways that will appeal to your target audiences. Universities or schools of public health may have [health communication programs](#) or concentrations. The Centers for Disease Control and Prevention's [Health Marketing Division](#) also has a number of health communication resources. on their website.

Finally, partnering with members of your target audience is key to learning about the issues that are important to them, developing approaches that will engage them, pre-testing your message, and recruiting participants for evaluating your material. Your audiences may be childcare providers, childcare van drivers, parents of young children, or others who can reach these groups--like nurses, pediatricians, or child safety seat technicians. If you aren't sure how to reach your audience directly, talk to others who have experience designing educational materials for the same groups, such as to promote child passenger safety, childproof homes or inspect child care facilities.

**Partnering with members of your target audience is key to learning about the issues that are important to them, developing approaches that will engage them, pre-testing your message, and recruiting participants for evaluating your material.**

## II. Developing the message and content

Once you have begun (1) developing a good understanding of your audience, (2) thinking about evaluation, and (3) identifying key partners to help you in the development process, you are ready to use this knowledge to develop the content for your material and consider basic principles of health communication.

### Step 4: Communicate your message

#### What approach should I use?

When a problem is as emotionally loaded as the prospect of children dying, there is often the temptation to use a *Fear-based appeal*—to frighten and shock the audience out of their “bad” behavior. But health communication research has shown that fear appeals are generally ineffective, and can have the unintended consequence of making your audience so uncomfortable that they ignore your message entirely (Witte & Allen). *Positive emotional appeals* focus on the benefits your intended audience members will gain when they take the actions advocated in your materials. While you can and should

**While you can and should identify the risks of leaving a child alone in a vehicle, the overall tone should focus on what your audience can do to prevent harm, rather than on scaring them into action.**

identify the risks of leaving a child alone in a vehicle, the overall tone should focus on what your audience can do to prevent harm, rather than on scaring them into action.

#### Why use health communication theories and models?

Because they work! The best public health campaigns use communication theories to guide who you target with your message, how you communicate with them, and to help you to decide on the best ways to evaluate the impact of your materials. We present a brief explanation of one widely tested and scientifically validated model. Although there are other valid and effective approaches, the Health Belief Model is a good place to start.

#### The Health Belief Model

The Health Belief Model (HBM) has been shown to both explain past behavior and predict future actions. Six factors in the HBM help predict whether individuals change their behavior (Janz):

- **Susceptibility:** Does the audience believe that they are at risk? Do they believe that they might leave a child unattended in a vehicle or that their child could gain entry to an unlocked vehicle by themselves? Do they believe that if either of these circumstances occurs, the child might be harmed?
- **Severity:** How severe do they think the consequences of a particular problem will be? Do they believe that being unattended in a vehicle could lead to serious injury or death of a child?

Taken together, people’s perceptions of susceptibility and severity are known as their level of ‘**perceived threat**’. Without perceived threat, action is rarely taken. However, if they perceive that a threat exists, they may be compelled to act. The course of action taken depends on:

- **Perceived benefits:** How will the suggested course of action benefit your audience? Benefits can be very concrete, such as protecting the lives of children or avoiding a fine, or they can be social or psychological, such as being perceived as a good parent.

- **Perceived barriers:** What barriers to taking action are perceived? These can be tangible or psychological. For example, does the business community make their services child friendly, or do parents feel like they have to leave their children in the car? Do parents lack access to available and affordable childcare? Do parents believe the neighborhood is safe and there is no need to lock the car in the driveway? Understanding and addressing the barriers your audience experiences will make your messages much more compelling.
- **Cues to action:** Does the message include cues to action to prompt the audience to engage in the desired behavior? These could be suggestions that your audience place their wallets or cell phones in the backseat so that they have to open the rear door when they leave the car, or that they make arrangements with their childcare provider to communicate promptly when the child is not coming to daycare.
- **Self-efficacy.** Does your audience believe that it can make behavioral changes? Encouraging, positive messages, as well as demonstrations of the desired behavior can increase self-efficacy and ability to perform the actions.

## Step 5: Develop the Content Based on Facts

This section contains facts, figures, and suggestions from the research on heat-related deaths in vehicles to use in your materials. This section is not intended to be used verbatim. Instead, we hope that you will take the information and make it your own, adapting the wording and approach for your audience and its needs.

### Many children die each year from heat-related causes when they are unattended in a vehicle

- Children's bodies do not cool as readily as adults do, so they become overheated much more easily.
- Heat stroke can occur quickly and can cause loss of consciousness, and eventually, death.

### A car can become dangerously hot within a matter of minutes

- Even in cooler weather, vehicles can heat to dangerous levels very quickly: interior temperatures can rise almost 20 degrees Fahrenheit higher than the outside temperatures within 10 minutes (even with the windows cracked open).
- The interior temperature can rise more than 30 degrees F° in 30 minutes.

**NOTE: The research does NOT indicate that death will occur within five minutes or less. There is no known safe amount of time to leave a child alone in a vehicle.**

### Children alone in a vehicle face additional dangers

- A child could put the car in gear and crash
- A child could activate the power window and become strangled or injured
- A child can gain entry to the trunk and become trapped inside
- The vehicle could be stolen with the child in it
- The child could get out of the car and become lost or injured

## To avoid accidentally leaving a child in the car, caregivers can

- Keep a stuffed animal in the child's car seat and when the child is in the seat, put the toy in front with the driver as a visual reminder.
- Place their wallets, cell phones or other valuables in the backseat with the child.
- Have a call plan for the childcare provider if the child does not show up as planned for daycare or school.
- Use extra caution to supervise young children and monitor their whereabouts when there are changes in routine.

## To avoid children getting into a vehicle by themselves, caregivers should

- Always lock the car
- Keep the keys out of reach of children
- Check the car, including the trunk, first if a child is missing
- Teach children that vehicles are never to be used as a play area

**Just as important as what you say in your material  
is what you don't say.**

## Research does NOT support the following statements that sometimes appear in materials or in news accounts

- Death will inevitably occur within moments or minutes.
- The child's placement in the back seat is the source of the problem. Traffic safety experts agree—and state laws enforce—that young children are safest in the rear seat.

## Step 6: Use clear and simple language

### Why is simple language so important?

Half the American adult population has limited literacy skills with difficulty performing all but the simplest reading-related activities. In addition, over one-third has only basic or below basic health literacy skills (Kutner). While the terms “hyperthermia” and “child passenger restraint” may be clear to you, they may confuse your target audience. You can use formative evaluation to decide what words to use instead, or consult tools like [The A to Z of Alternative Words](#).

To reach the broadest audience, aim to write materials at 5<sup>th</sup> or 6<sup>th</sup> grade reading levels, using words with minimal syllables. Avoid jargon and acronyms, and focus instead on clarity and simplicity. Not only will this result in materials that are more easily understood, but focusing on readability will lead to the most memorable messages.

### What can I do to ensure my material is easy to read?

- Use direct language. Materials that refer to the audience as “you” rather than as “parents” or “caregivers” are more personal and engaging.
- Choose words that your reader knows. If you need to use a technical term, clearly define it.
- Keep your language simple, specific, direct, and write in the active voice (e.g., “take your child with you” rather than “children should always be taken with you”).

## How can I tell if my materials' readability levels match my audience's needs?

There are tools that can help ensure that materials are written at the right reading level for your audience. One easy-to-use online resource is the [SMOG](#) ("simple measure of gobbledygook"). This tool assesses the readability of the material and can help you decide if you're on the right track to reach your audience. You can also calculate the SMOG by hand (see the reference article for the formula).

Remember that what appeals to you may not be most effective with your audience.. Your target audience isn't child safety or injury-prevention professionals so their feedback that your materials are great doesn't mean that your audience will understand or use them. Always consult members of your intended audience to be sure that what you have written is clear, concise, and easy to read.

## Step 7: Generate Images

Images can help or hinder your message. Used well, they can attract your audience's attention and help emphasize the behaviors you are advocating. Used badly, they can be off putting or can confuse your audience. Follow the guidelines below while choosing images to ensure that they have the effect you intend.

**Used well, images can attract your audience's attention and help emphasize the behaviors you are advocating. Used badly, they can be off putting or can confuse your audience.**

Revisit the recommendations in Step 4: Communicating Your Message, keeping in mind that positive rather than fear-based appeals are likely to be most effective.

As part of creating your positive appeal:

- Choose images that demonstrate the appropriate behaviors
- Avoid images that try to attract attention by scaring or shocking the audience.
- Match the images you use in your material to the characteristics of your audience to increase their attention (e.g., if you are targeting a multi-cultural community, use photographs representing a variety of cultures). Your readers will relate more to the images and this will increase their impact.
- Consider your audience's developmental stage. Many materials addressing children's health and safety use cartoons, but typically, the target audience is adults, and cartoons may not be the most effective way of reaching them.
- Pictograms are not the same as cartoons: used appropriately, pictograms can improve the comprehension of a low-literacy audience by illustrating your message.
- **Most importantly:** avoid using contradictory images such as showing a smiling sun when discussing the dangers of hot vehicles, as this may confuse readers. This is particularly true if your readers have low literacy levels or are only skimming the material.

## Step 8: Solicit feedback

Once you have a draft product, solicit feedback from expert partners and from your target audience. Your partners in injury prevention and health communication can review it to ensure technical accuracy, effectiveness, and appropriateness.

Turn again to the community partners whose input you sought at the outset of the development process. As described in Step 1: Understand Your Audience, obtain feedback from community leaders and from community residents themselves. Feedback from the community residents who make up your target audience is invaluable in ensuring that the draft material is appropriate. They will often point out things that you and your professional colleagues may not have considered. To obtain feedback, conduct focus groups, sponsor informal discussions, conduct spontaneous interviews or use a simple survey tool at a health fair, safety seat inspection site, or shopping mall.

You may conduct these groups or surveys yourself, ask a local partner to do so, or hire a marketing or health communication organization with experience in pilot-testing educational material. Some questions you may want both professionals and members of your target audience to answer are:

- Is the message clear? What are the main points?
- Is the message relevant for the community?
- What new information is provided? What behavior could it change, and why?
- Is the language appropriate and clear? What terms are unclear?
- Are the graphics and design appealing? Do they convey the message? Could they be misunderstood? Are any offensive or culturally inappropriate?

Discuss the feedback you receive with your partners, and make necessary changes. Finally, be sure to acknowledge the role of your community partners in creating the material. This shows respect for your partners and can encourage them and other community organizations to become more involved in future safety efforts. It also adds credibility, showing that the material was created using input from people who are familiar with the audience. It is a win-win technique for all involved.

**Now you have created a final version.  
Celebrate your accomplishments!**

### III. Distributing your material and assessing its impact

Your material is finished, but your job is not done. How your material is distributed will strongly influence how your audience perceives it. Completing process and impact evaluations of your material will tell you whether it accomplishes your goals. Finally, you'll want to review and update your material to be sure that it stays current.

#### Step 9: Develop a distribution plan

A comprehensive plan for distributing your material is a vital step in reaching your audience. These distribution strategies can increase the likelihood that your material will reach and have an impact on its intended audience:

- Ask for reinforcement of your messages by credible and trusted sources (e.g., community leaders, schools, health care professionals, radio, television, and faith-based institutions). Your partners may be able to advise you about whom the audience sees as credible sources, and you will already have collected much of this information during Step 1: Understand Your Audience.
- Coordinate distribution with other agencies that distribute safety materials (e.g., the state highway safety office, local health departments, or police departments).
- Distribute materials through programs used by your audience such as prenatal classes, WIC programs (the Supplemental Nutrition Program for Women, Infants, and Children), pediatric programs, Head Start, child care agencies, local business associations, community volunteer groups, regional consumer product-safety offices, state public health insurance programs, and local civic organizations.
- Use innovative methods of distribution (e.g., inserting safety messages into the state driver's license manual, electric bills, or on relevant Web sites).
- As mentioned in Step 2: Plan to Evaluate, your material is much more likely to be effective if it is part of a broader initiative to change behavior. Include the material in larger programs or campaigns, such as public awareness weeks.
- Work with day care providers to provide information to parents through their newsletters, fliers and take-home materials.

#### Step 10: Assess the material's impact

Following distribution, implement the evaluation strategy you developed in Step 2 to ensure that you are meeting your targets for distribution and that your material is having an impact. This will involve data collection, reporting your findings, and continued review of your materials. Remember, evaluation is an ongoing process. To keep current and relevant, continue to monitor your progress and your audience's response, and implement necessary changes throughout the life of your material.

**Remember, evaluation is an ongoing process. To keep current and relevant, continue to monitor your progress and your audience's response, and implement necessary changes throughout the life of your material.**

## Data Collection:

*Process evaluation* depends on accurate record keeping. Record the number of copies distributed to various organizations as well as requests for additional copies—from existing distributors and from organizations that would like to begin distributing your materials. You might also want to conduct brief telephone interviews with the people in the organizations distributing the material, recording responses on a written form you create for this purpose. These types of interviews could inform you about how the communities they serve are responding to your materials, whether there are any logistical distribution issues to consider, etc. Another method of collecting data is to hold focus groups of individuals who are distributing or receiving materials.

To assess the level of interest in your materials, consider distributing them in waves to organizations that will be providing them to your target audience. By sending a limited number to these organizations and keeping track of subsequent requests, you'll be able to precisely gauge how many units are being used.

If your materials are available online, you can measure the number of visits and downloads, tracking changes over time, and comparing the results with other popular child safety materials available through the same website.

If you have the capacity to assess changes in knowledge, attitudes, and behavior among your target audience, use short surveys, actual observations of behavior, or pre-tests and post-tests to evaluate *impact*. Too often, unrealistically high hopes about the impact and poorly conceived approaches can lead to a finding that there is no detectable impact. However, you can avoid this if you set realistic goals, and know your organization's limits. If you need a consultant to assist with the evaluation, try to involve him or her in the process as early as possible. Christoffel and Gallagher recommend that you choose a consultant who has performed these types of evaluations before, such as:

**Too often, unrealistically high hopes about the impact and poorly conceived approaches can lead to a finding that there is no detectable impact.**

- A health education researcher from an academic setting
- An agency that has implemented a program similar to yours
- An author of an evaluation paper in the literature
- A professional organization such as the American Evaluation Association
- The director of your [state](#) or [local](#) health department's injury prevention program

To ensure smooth data collection, make sure to test data-gathering instruments before you begin officially collecting your information.

## Report the Findings

After you have compiled and analyzed the data, write a report describing the results of the evaluation. This document could be as simple as a few pages for a process evaluation (e.g., a memo to a funder or to your partner agencies) or if your material is part of a large-scale initiative, as extensive as a 100-page report or journal article.

Documenting your findings is helpful when revising and updating the material in the future, if others use or adapt the material, or if you need to decide whether to print more copies. Whether you find that your material was effective or ineffective in influencing your audience's knowledge, attitudes, or behaviors, that information can be useful for you and your colleagues. By sharing your findings, you can contribute to the injury prevention field, improve your colleagues' practices, and ultimately, to prevent injuries through the creation of more effective materials.

## Continue to Review Your Material for Accuracy and Relevance

To ensure that your material stays up-to-date:

- Conduct periodic reviews to incorporate information about changes in laws, new technology, and new audiences in your community of interest.
- Collect feedback from your users.

Be prepared to revise your material if needed based on the feedback you receive. While the work that a good evaluation necessitates may seem daunting, the rewards you'll reap by sharing your findings with colleagues and by keeping your material up to date will far outweigh the costs.

## Conclusion

Deaths to young children in parked motor vehicles are needless tragedies that can be avoided by applying known prevention techniques:

- adult supervision,
- policy changes,
- enforcement of laws,
- education about risks and safe practices,
- modifications in behavior, and
- the simple technique of keeping the car locked when not in use.

**Developing and disseminating materials that are known to be effective—that have been tested and evaluated with the intended audiences—will ultimately benefit young children, the adults who care for them, and the programs and practitioners dedicated to keeping them safe.**

# Resources

## Steps 2 and 10: Resources on Program Evaluation

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A Guide to Evaluation Primers, produced by the Association for the Study and Development of Community for The Robert Wood Johnson Foundation. [www.rwjf.org/files/publications/RWJF\\_ResearchPrimer\\_0804.pdf](http://www.rwjf.org/files/publications/RWJF_ResearchPrimer_0804.pdf)

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## Step 4: Resources on Communications

AMC Cancer Research Center, in cooperation with Centers for Disease Control and Prevention. 1994. Beyond the Brochure: Alternative Approaches to Effective Health Communication. [www.cdc.gov/cancer/nbccedp/bccpdfs/amcbeyon.pdf](http://www.cdc.gov/cancer/nbccedp/bccpdfs/amcbeyon.pdf)

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Maibach, E. and Parrott, R. L. (Eds.). (1995). Designing Health Messages: Approaches from Communication Theory and Public Health Practice. Thousand Oaks, CA: Sage.

## Step 6: Resources on Clear and Simple Language

Centers for Disease Control and Prevention, and Agency for Toxic Substances and Disease Registry. 1999. Simply put: Tips for creating easy-to-read print materials your audience will want to read and use. Atlanta, GA: Centers for Disease Control and Prevention.

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Washington State Department of Health. 2000. Guidelines for Developing Easy-to-Read Health Education Materials. <http://www3.doh.wa.gov/here/howto/images/easy2.html>

The SMOG (Simple Measure Of Gobbledygook) online calculator. <http://www.harrymclaughlin.com/SMOG.htm>

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