

# **EVALUATION OF SAFETY BELT EDUCATION PROGRAM FOR EMPLOYEES**

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FINAL REPORT**

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16. Abstract <p>This research was designed to determine the effectiveness of a nine-month safety belt educational program, utilizing various informational materials developed by NHTSA, in increasing safety belt usage among corporate employees. The materials used include an audio-visual slide presentation and a variety of pamphlets, brochures and booklets. Two U.S. corporations agreed to participate in the research and authorized their Safety Director at selected plant sites to implement the program. In consultation with NHTSA, a structured plan for implementing the educational program was prepared by ORC and presented to the Safety Directors in the companies that had agreed to participate. An evaluation of the program's effectiveness was accomplished by observing employees' use (or non-use) of safety belts as they entered/exited Company parking areas. The observation studies were conducted before the program was implemented, during the program, and after it had been completed. Two principal findings emerge from the research: (1) Corporate Safety Directors generally are reluctant to involve employees in an educational program directed specifically at safety belt usage, although they acknowledge the importance of such a program; (2) The observation studies conducted at the "experimental" plants indicate that the nine-month educational program did not significantly increase usage of safety belts while driving to or from work.</p>			
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# METRIC CONVERSION FACTORS

## Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
<b>AREA</b>				
in <sup>2</sup>	square inches	6.5	square centimeters	cm <sup>2</sup>
ft <sup>2</sup>	square feet	0.09	square meters	m <sup>2</sup>
yd <sup>2</sup>	square yards	0.8	square meters	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.6	square kilometers	km <sup>2</sup>
	acres	0.4	hectares	ha
<b>MASS (weight)</b>				
oz	ounces	28	grams	g
lb	pounds	0.46	kilograms	kg
	short tons	0.9	tonnes	t
	(2000 lb)			
<b>VOLUME</b>				
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.96	liters	l
gal	gallons	3.8	liters	l
ft <sup>3</sup>	cubic feet	0.03	cubic meters	m <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.76	cubic meters	m <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

\*1 in = 2.54 (exact). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price \$2.25, SO Catalog No. C13.10-286.

## Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
<b>AREA</b>				
cm <sup>2</sup>	square centimeters	0.16	square inches	in <sup>2</sup>
m <sup>2</sup>	square meters	1.2	square yards	yd <sup>2</sup>
km <sup>2</sup>	square kilometers	0.4	square miles	mi <sup>2</sup>
ha	hectares (10,000 m <sup>2</sup> )	2.5	acres	ac
<b>MASS (weight)</b>				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	ton
<b>VOLUME</b>				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m <sup>3</sup>	cubic meters	35	cubic feet	ft <sup>3</sup>
m <sup>3</sup>	cubic meters	1.3	cubic yards	yd <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



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## Introduction

### Background

A number of safety belt education program "packages" have been developed by NHTSA. These materials are intended to encourage various segments of the automobile-using public to use their safety belts. These kits or packages include an audio-visual presentation and a variety of printed materials -- pamphlets; brochures, and booklets.

It is important to evaluate these educational materials because, if they are to be effective in increasing belt usage, they are likely to be much more widely utilized than at present. On the other hand, if the materials are found to be ineffective, the program will need to be reassessed.

In a study entitled, "Evaluation Of The Effects Of A Seat Belt Education Program Among Elementary School Children, Loudoun County, Virginia" (Contract Number DOT-HS-800-766), the educational materials were used in a number of public schools during, approximately, a one-month period. The results, as measured by observations of belt usage, indicated a small, but significant, increase in belt usage by the students who were exposed to the materials.

An educational package that is a prime candidate for evaluation is one developed to increase safety belt usage among employees. Employees are obviously an important group to reach, not only because they are numerous in the population, but also because they can be influential in affecting their family's and friends' behavior with regard to safety belt usage.

From a research standpoint, employees are a group whose behavior can be evaluated effectively and efficiently. Employee groups lend themselves well to experimental design and, because of their concentrated numbers, can be reached by structured educational programs and observed for belt usage as they enter or leave controlled parking areas at their place of employment.

### Research Methodology

The basic research design called for the completion of four basic tasks:

- I Obtain Company Cooperation
- II Develop Program Implementation and Evaluation Procedures
- III Implement Education Program and Evaluation Procedures
- IV Conduct Observation Studies

### Task I - Obtain Company Cooperation

In obtaining company cooperation, Opinion Research Corporation was guided by the following criteria:

- If possible, the plants should belong to the same company, to hold constant the factors of ownership and overall policies.
- Whether one company or two owns the plants, they (the plants) should be as similar as possible, in terms of industry, number of employees, and "mix" of different categories of employees.
- The plants would be reasonably far apart geographically, so that there is a minimum of communication between employees in the experimental plant and those in the control plant. Ideally, the employee newspaper in the experimental plant should not be the same as the one in the control plant.
- The plants should have about 1,000 employees each -- enough to provide many observations of safety belt usage, but should not have so many employees as to make the training program burdensome to the company.
- Both plants should have parking yards or lots, with specific entrances/exits or access roads, and (ideally) should be protected by a guard, so that employees have to slow down or nearly stop as they approach the gate.
- Last, but not least, the company management must be willing to implement an employee education program, in the experimental plant, that is really worthwhile -- not a token program.

One problem encountered early in the research project was the unwillingness of many U.S. corporations to participate in the educational program, and this is a significant finding in itself. The task of obtaining company cooperation in the safety belt education program for employees took at least eleven months to complete (July 1977 - May 1978). During this period, Opinion Research Corporation's officers and research staff members contacted twenty-three major U.S. corporations to inquire about their willingness to cooperate and to participate in the educational program.

1/ The descriptions "experimental plant" and "control plant" are used throughout this report and are defined as follows:


Experimental plant = The plant selected to participate in the nine-month safety belt education program.

Control plant = The plant selected for the observation of safety belt usage only. Employees were not exposed to educational program.

The initial contact with the company was a telephone call to a high-level official, the purpose being to explain the objectives of the study and what activities would be required on the part of a participating company. This initial phone call was followed by a detailed letter (Exhibit A in Appendix) that covered the following subject areas: a description of the study objectives, the proposed research plan, plant requirements in terms of number of employees and kinds of parking areas, and a description of the contents of the employee educational program. About two weeks after the letter was sent, a second telephone call was made to answer any questions the company official might have regarding the study and to determine if the company was still interested in participating in the program.

It became quite apparent after the second call that a number of additional calls would have to be made to each company before a final decision to participate or not to participate would be made by the company official contacted. The long delay in obtaining a decision was due primarily to a decision-making process which required not one but a number of company officials to meet and discuss the program.

ORC records indicate that each of the twenty-three companies that expressed an initial interest in the educational program required, in addition to the letter, an average of four follow-up telephone calls to determine their willingness or unwillingness to participate in the program.





Following are the companies and the title of the company officer contacted:

<u>Company</u>	<u>Title of Contact</u>
7/77 Ansul Company	Vice President, Personnel
7/77 Union Carbide Corporation	Ass't. Corp. Dir., Safety
7/77 Kaiser Aluminum & Chemical	Div. Mgr., Safety & Protection Services
1/78 FMC Corporation	Manager, Safety
1/78 General Electric Company	Manager, Corporate Safety & Security
1/78 International Paper Company	Manager, Safety Services
1/78 SCM Corporation	Manager of Safety & Loss Prevention
2/78 Westvaco Corporation	Vice President, Public Relations
2/78 Johnson & Johnson	Dir., Employee Health & Safety
2/78 Combustion Engineering	Vice President, Public Relations
2/78 Mead Corporation	Assistant Treasurer
2/78 Merck & Co., Inc.	Director of Corporate Safety
2/78 Warner-Lambert Company	Corporate Safety Manager
2/78 Eastman Kodak Company	Director, Public Relations
3/78 International Business Machines Corp.	Corporate Safety Manager
3/78 Philip Morris, Inc.	Manager, Security
3/78 Timken Co.	Corporate Safety Director
3/78 Goodyear Tire & Rubber Co.	Vice President
5/78 E.I. DuPont	Plant Manager - Sabine River
5/78 Prudential Property & Casualty Co.	Director of Research
5/78 American Cyanamid Company	Corporate Safety Director
5/78 Allied Chemical Company	Corporate Director of Safety & Loss
5/78 Northwestern Bell Telephone Co.	Safety Director

American Cyanamid's Bound Brook, N.J. plant, selected as a control group, was later eliminated from the study due to a work stoppage that occurred at the plant in December, 1978. In February, 1979, management informed ORC that, because of labor difficulties they were having at this plant, they did not wish to use this facility as a control group. Management suggested that ORC contact their Lederle Division in Pearl River, N.Y. as a potential substitute for the Bound Brook plant. In March, 1979, ORC was authorized to use the Lederle Division as a control group and to observe safety belt usage by employees as they left the plant's parking areas. ORC conducted two observation studies at this plant. A study in March, 1979 showed a usage rate of 12.5% and a study in July, 1979 showed a usage rate of 13.7%. The Lederle plant was dropped from the study as a control group because over half of the employees were office and professional people, while the experimental plants included predominantly production workers.

The Davis & Geck plant in Danbury, Connecticut was dropped from the study because no appropriate "control plant" could be found for this plant. Also, the physical facilities at Davis & Geck were not suitable for conducting certain parts of the educational program, particularly the audio-visual presentation.

### Task III -- Implement Education Program and Evaluation Procedures

A plan to implement the safety belt education program for employees at the experimental plants was developed by ORC. The plan was submitted to NHTSA's Contract Technical Manager for review in June, 1978. The plan was approved with certain modifications and returned to ORC in early July, 1978. A copy of the final plan will be found in the Appendix section.

During September and October, 1978, ORC staff members traveled to the plant sites selected for the study. These visits had two main objectives: (1) to meet the Safety Directors at the experimental plants and discuss the implementation and evaluation plans with them and (2) to evaluate, at all plant sites, the employee parking areas to make certain that accurate observations of safety belt usage could be made as employees entered or exited the parking areas.

Safety Directors at the experimental plants specified the quantities of educational materials that they would require. Based on these requests, the following materials were shipped by NHTSA in October, 1978:

	<u>Allied Chemical Columbia, S.C.</u>	<u>Formica Corp. Evandale, Ohio</u>
<u>"The Safety Belt Message -- The Student's Lesson"</u>	1800	1600
<u>"How Many of These Fairy Tales Have You Been Told?"</u>	1800	1600
<u>"The Automobile Safety Belt Fact Book"</u>	1800	1600
<u>"Encouraging Employees To Use Safety Belts"</u>	25	150
<u>"Getting The Safety Belt Message Across -- A Guide For Driver Education Instructors"</u>	25	150
<u>"Safety Belts -- Fact and Fiction" Slide/Tape Program"</u>	2	3

#### Task IV -- Conduct Observation Studies

At the selected experimental and control plants, ORC staff members surveyed the employee parking areas to determine the most advantageous locations for observing safety belt usage by employees as they entered or exited the parking areas. Detailed maps were drawn, showing the various roads leading into and out of the parking areas and the most appropriate locations for observing belt usage.

The local Safety Director provided ORC personnel with detailed information as to the arrival and departure times of all employees and the number of observation studies that would be needed to cover most of the work force. For example, at Allied Chemical's, Columbia, South Carolina plant it was determined that virtually all employees leaving the parking areas could be observed over a two-day period. It was determined, however, that it would not be possible to observe employees on the 4 p.m. to midnight shift since accurate observations could not be made at 4 p.m. or at midnight because of darkness.

Earlier pretesting indicated that the most accurate and efficient means of observing employees for belt usage was to use mechanical hand-held counters. Observers were stationed at a parking lot gate or at a stop sign on a company road leading to a public road or highway. This allowed 30 seconds or longer to look inside the car for observing safety belt usage. Each observer was equipped with three mechanical counters. Two of the counters were held -- one in the right hand and the other in the left hand -- while the third counter was carried in the observer's pocket. The counter in the right hand was activated for drivers who were not wearing either a shoulder harness or a lap belt. The counter in the left hand was activated for drivers who were wearing the shoulder harness and lap belt. The third counter was activated when the driver was restrained by only the lap belt. This method offered two advantages. First, employees were not aware that they were being observed for safety belt usage. Second, this method was accurate and fast so that virtually all cars entering or exiting the parking areas could be observed.

### Research Findings

This section of the report describes:

- (1) How the Safety Directors at two experimental plants actually implemented the safety belt education program for their employees.
- (2) The results of the safety belt observation studies at the two experimental plants as compared with the results of the usage studies at a control plant.

The two experimental plants are:

Allied Chemical Co., Columbia, South Carolina

Formica Corporation, Evandale, Ohio

The control plant is:

Allied Chemical Co., Hopewell, Virginia

(1)

### How Safety Directors Implemented the Safety Belt Education Program for Employees

At the start of the program, ORC staff members asked the Safety Director in each of the experimental plants to keep a log or a record of the specific activities that they would engage in, with regard to the educational program. At the end of the program, each Safety Director was asked to respond to a questionnaire which carried the following introduction:

"A plan to implement the Safety Belt Education Program for Employees was submitted to Safety Directors in companies that agreed to participate in the program. It was emphasized that the plan was "suggestive" and that the actual program to be implemented was to be determined by the Safety Director and local plant management."

"Opinion Research Corporation is now in the process of drafting a final report to be submitted to the National Highway Traffic Safety Administration. In this report, we need to list or document all of the activities that your company engaged in during the nine-month program. Your responses to the following questions will be greatly appreciated."

Responses to the questionnaire by the Safety Director at Allied Chemical, South Carolina and by the Safety Director at Formica Corporation Evandale, Ohio are summarized below and on the pages that follow. With few exceptions, the employees at both experimental plants were exposed to most of the educational inputs called for in the plan developed by ORC. According to the Safety Director, employees at Allied were not encouraged to submit articles on safety belt usage in the plant newspaper and the program was not concluded with a company-wide meeting. The Safety Director at the Formica Corporation also indicated that they did not conclude the program with a company-wide meeting. Also, since his local plant did not have a newspaper, he was unable to use this media for educational purposes.

### Implementation of Safety Belt Education Program for Employees

	<u>Experimental Plants</u>	
	<u>Allied Chemical Columbia, S.C.</u>	<u>Formica Corporation Evandale, Ohio</u>
Total Employees	<u>2067</u>	<u>1100</u>
Activities engaged in during nine-month program:		
1. Letter in support of program sent to employees	Yes	Yes

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- |   |     |  |
|---|-----|--|
| 2. Announcement of program appeared in plant newspaper  | Yes | No plant newspaper (notice on bulletin boards) |
| 3. Signs or posters to encourage use of safety belts placed at various locations around plant     | Yes | Yes  |
| 4. NHTSA materials and booklets distributed to employees:   |     |  |
| "Automobile Safety Fact Book"   | Yes | Yes  |
| "How Many of These Fairy Tales Have You Been Told?"   | Yes | Yes  |
| "The Safety Belt Message--The Student's Lesson"   | Yes | Yes  |
| 5. NHTSA materials and booklets distributed to Safety Departments or other supervisory personnel: |     |  |
| "Getting the Safety Belt Message Across--A Guide For Driver Education Instructors"                | Yes | Yes  |
| "Encouraging Employees To Use Safety Belts"   | Yes | Yes  |
| 6. Safety Belts--Fact and Fiction: 15-minute audio-visual presentation shown to employees         | Yes | Yes  |
| 7. Actual demonstration of how to fasten and wear safety belts in late-model cars                 | Yes | No   |
| 8. Inserted news article on use of safety belts in plant newspapers                               | Yes | No   |
| 9. Encouraged employees to submit articles on safety belts in plant newspaper                     | No  | No   |
| 10. Concluded program with a company-wide meeting   | No  | No   |

#### Verbatims

"Please explain how the various aspects of the program and the printed materials were presented to employees."

#### Allied Chemical, South Carolina

"The audio-visual slide presentation was shown to large groups by department. Printed materials were passed out to employees as they entered or left the plant. Articles on the use of safety belts appeared in the local plant newspaper during April, July, and late August. Articles on safety belts were placed on bulletin boards in every department."

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Formica Corporation, Evandale, Ohio

"Our foreman and member of the safety committee conducted monthly meetings with employees using all the NHTSA materials supplied to us by Opinion Research Corporation."

"Did your Company conduct any safety belt educational programs that were not suggested in the plan, but that you believed would be useful?"

Allied Chemical, Columbia, South Carolina

"We showed a movie on the value of safety belts during a crash test of cars in California. About 300 employees were exposed to the movie. The film was on loan for two weeks and was not available to use with all our employees."

Formica Corporation, Evandale, Ohio

"No programs other than the ones suggested in the plan were conducted."

Observations of Safety Belt Usage at the Parking Areas of the Experimental and Control Plants

The observation studies conducted by ORC staff members at the experimental plants indicate that the nine-month educational program for employees did not significantly increase their use of safety belts while driving to and from work.

Table 1 shows, for both the experimental plant (Allied Chemical, Columbia, South Carolina) and the control plant (Allied Chemical, Hopewell, Virginia), the percent of employees (drivers) who were observed to be wearing a safety belt as they entered or left the parking areas. For each plant, the usage data is presented for three points in time: (1) a month or so before the educational program was announced to employees in the experimental plant; (2) during the course of the program; and (3) about two months after the program was completed.

In the experimental plant, the before, during, and after usage scores were 3.9 percent, 5.4 percent and 6.1 percent, respectively. The net gain in usage of 2.2 percent between the before and after studies, while in a favorable direction, is not statistically significant.

In the control plant, the before, during, and after usage scores were 5.8 percent, 6.3 percent, and 7.1 percent, respectively. The net gain of 1.3 percent between the before and after studies is not a statistically significant difference.



Table 2 shows, for the experimental plant (Formica Corporation, Evandale, Ohio) and the control plant (Allied Chemical, Hopewell, Virginia), the percentage of employees (drivers) who were observed to be wearing a safety belt as they entered or left the parking areas.

In the experimental plant, the before, during, and after scores are 7.8 percent, 12.1 percent, and 8.9 percent, respectively. The net gain in usage of 1.1 percent between the before and after studies is not statistically significant. As noted above, the 1.3 percent gain in usage at the control plant is also not statistically significant.

#### Observation Studies at Plant Parking Areas

Percent of employees (drivers) wearing safety belts as they entered/exited company parking areas

Table 1

	<u>Allied Chemical Columbia, S.C. "Experimental"1/</u>		<u>Allied Chemical Hopewell, Va. "Control"2/</u>	
	N	%	N	%
Before Program Announced	741	3.9	495	5.8
During Program	760	5.4	727	6.3
After Program Completed	784	6.1	623	7.1
Before vs. After Percent Change		+2.2		+1.3

Table 2

	<u>Formica Corporation Evandale, Ohio "Experimental"1/</u>		<u>Allied Chemical Hopewell, Va. "Control"2/</u>	
	N	%	N	%
Before Program Announced	566	7.8	495	5.8
During Program	572	12.1	727	6.3
After Program Completed	652	8.9	623	7.1
Before vs. After Percent Change		+1.1		+1.3

1/ Employees exposed to safety belt education program.

2/ Employees not exposed to safety belt safety belt education program.

Table 3 shows the average safety belt usage scores at three points in time at the two experimental plants combined and at the control plant. When the before and after scores are compared, the experimental plants show a net gain of 1.8% and the control plant shows a net gain of 1.3%. Neither of these percentage gains are statistically significant. A small, but significant, gain in usage at the experimental plants (2.7%) occurred between the before and during studies, but did not hold up when the after studies were conducted.

Table 3

Summary Findings

Observation Studies at Plant Parking Areas

Percent of employees (drivers) wearing safety belts as they entered/exited company parking areas.

Before Program Announced

		<u>N</u>
Experimental Plants*	<input type="text"/> 5.6%	(1307)
Control Plant	<input type="text"/> 5.8%	(495)

During Program

Experimental Plants*	<input type="text"/> 8.3%	(1332)
Control Plant	<input type="text"/> 6.3%	(727)

After Program Completed

Experimental Plants*	<input type="text"/> 7.4%	(1436)
Control Plant	<input type="text"/> 7.1%	(632)

\* Average usage for two experimental plants

### Attitude Survey

In addition to conducting the observational studies at Formica Corporation's, Evandale, Ohio plant (experimental group), employees were asked to respond to a self-administered questionnaire. The questionnaire was designed primarily to obtain employees' reactions to the education program as a whole, the audio-visual presentation, and the various informational booklets that they had been provided. The in-plant survey was administered by the Safety Director and his staff. ORC provided technical help and processed the questionnaires.

A member of the Safety Department informed ORC that approximately 90% of their employees (about 990 in number) participated in the Safety Belt Education Program. Among this group, 267 employees completed the self-administered questionnaire for the attitude survey. Thus, the data that follows reflect the opinions and attitudes toward the program of the 267 employees who were willing to participate in the attitude study. The data, however, are not representative of all employees exposed to the program since, for one reason or another, many of the employees did not take part in the survey.

### Formica Corporation Employees Rate Various Aspects of the Educational Program

About three out of four Formica employees (58%), who participated in the educational program and completed the self-administered questionnaire, rate the program as a whole either "excellent" or "good." Forty-two percent characterize the program as either "fair" or "poor." Majorities also rate the "audio-visual slide presentation" and the "Automobile Safety Belt Fact Book" above average. Forty-five percent give an "excellent" or "good" rating to the pamphlet entitled "How Many of These Fairy Tales Have You Been Told?", while 25% consider this informational piece either fair or poor. More employees rate the booklet "The Safety Belt Message--The Student's Lesson" average or below than rate it above average (40% vs. 32%).

"How would you rate each of the following"?

(Read percentage across)

#### Formica Corporation Employees

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>No Opinion</u>
"The Safety Belt Message-- The Student's Lesson"	7%	25	30	10	28
"How Many of These Fairy Tales Have You Been Told"?	7%	38	17	8	30
"Automatic Safety Belt Fact Book"	12%	39	22	8	19
"The Slide Presentation"	19%	44	15	9	13
"The Program As A Whole"	11%	47	29	13	0

Among Formica employees who responded to the self-administered questionnaire, three out of five (63%) say that the educational program did not persuade them to start wearing safety belts. One in ten says the program was convincing and that he or she now wears safety belts. About one-fourth (23%) claims that they used safety belts before being exposed to the program.

"Which of the following best describes the effect of the program on your own wearing of safety belts?"

Total Formica Employees	<u>267</u>
Used safety belt before program began	23%
Program helped to convince me and I now wear safety belts	10
Program somewhat convincing, but I still don't wear safety belts	44
Program <u>not</u> convincing and I still don't wear safety belts	19
Not reported	4

In response to the question below, a minority of Formica employees (22%) offer the following suggestions as a means of getting their fellow employees to wear safety belts more often.

"What suggestions do you have for getting employees to wear safety belts more often?"

Total Employees	<u>267</u>
None or no opinion	78%
Show more pamphlets, pictures, slides	4
Be persistent -- keep after employees until they are convinced of their importance	4
Present more statistics on traffic deaths	3
Let people decide for themselves	3
Need mandatory seat belt laws	2
Offer financial incentives	1
- Make safety belts more comfortable	1
Other answers	4

## APPENDIX

(Letter Sent to Corporate Safety Director)

Dear \_\_\_\_\_

We were glad to hear that you might be willing to participate in the research study we are planning to conduct, "Evaluation of Safety Belt Education Program for Employees."

The purpose of the research is to see if employees who are exposed to educational materials regarding safety belts are more likely to wear them than employees not so exposed.

The research method calls for selecting two plants: (1) an "experimental" plant, in which employees are given some information about safety belts, and (2) a "control" plant, in which employees are not given such information. We will then observe employees in both plants as they enter or leave the parking yard, to determine the proportion of each group that wear their safety belts. We plan to do these observations before, during, and after the educational campaign.

Ideally, the plants to participate in this study should meet the following requirements:

- Belong to the same company. (However, plants of different companies can be used if they have about the same "mix" of different categories of workers.)
- Be reasonably far apart geographically, so that there is a minimum of communication between employees in the "experimental" plant and those in the "control" plant.
- Have about 1,000 employees each -- large enough to provide many observations of safety-belt usage, but not so large as to make the training program too much of a burden to the company. (Obviously, a range above and below 1,000 will have to be considered.)
- The "experimental" plant should be a major element in the population of the community, so that employees have a reasonable chance of being observed in their driving around town.

The main thing we would need from you, aside from permission to observe safety-belt usage at your parking area, is agreement to carry out a safety-belt educational program among employees at the "experimental" plant.

This program is probably best administered through your Safety Director, using materials supplied free of charge by the National Highway Traffic Safety Administration.

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Let me hasten to say we would want the educational program to be as little burden to you as possible. As a matter of fact, the educational program to be tested in your plant should be one that any other plant might realistically be expected to undertake.

We would propose the following:

- (1) Distribute to all employees, through your internal mail system, an insert with the company newspaper, or as otherwise convenient, a copy of the NHTSA booklet, "Automobile Safety Belt Fact Book."
- (2) Two or three weeks after step (1), schedule audio-visual presentation, "Safety Belts - Facts and Fiction," for all employees. This is a "self-contained," 15-minute presentation, consisting of 50 numbered slides and an audio-cassette with automatic slide advance. The presentation might be scheduled as part of a regular employee meeting, during employees' lunch hours, or at some other convenient time.
- (3) Immediately after the audio-visual presentation, give each employee, to take home, a copy of the booklet, "How Many of These Fairy Tales Have You Been Told?"
- (4) Two or three weeks after steps (2) and (3), distribute to all employees, "The Safety Belt Message -- the Student's Lesson."

In addition to the preceding steps involved in the education program and test, it is possible that plant management might wish to obtain information on attitudes towards, and usage of safety belts, through questionnaires sent to employees. This step could not be carried out at Government expense, but we (Opinion Research Corporation) could provide technical consultation to the Safety Director in conducting the survey and analyzing and reporting the results.

This last step is entirely optional, but if you decided to undertake it, Opinion Research Corporation would be happy to see a few items added to the questionnaire, along the lines of rating the company, the job, working conditions, chances for getting ahead, etc. This would make the questionnaire a tool for getting some basic employee attitude information. ORC has "norms" for answers to these questions, from many other employee surveys, and we would be glad to share this information with you, at no cost.

We hope that you will see your way clear to participating in this test of an employee information program on safety belts. It could be that you will help save some employee lives in the future, even some of those of your own employees or their families.

Sincerely,

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## SAFETY BELT EDUCATION PROGRAM FOR EMPLOYEES

### AN IMPLEMENTATION AND EVALUATION PLAN

Various safety belt educational programs have been developed by the National Highway Traffic Safety Administration (NHTSA) to encourage specific segments of the driving and riding public to utilize safety belts. One such program, consisting of booklets and an audio-visual presentation, has been developed for employees. NHTSA wishes to evaluate the educational materials by observing safety belt usage among employees exposed to the materials. If the educational program is found to be effective in increasing belt usage, it is likely to be much more widely used than at present.

Opinion Research Corporation (ORC) has been authorized by NHTSA to conduct the evaluation study. The primary responsibilities of ORC are: (1) to obtain the cooperation of a company that is willing to participate in the study; (2) to provide guidance and assistance in setting up the program as well as providing the necessary materials; (3) to evaluate the effectiveness of the program by observation of belt usage; and (4) to deliver a report on the study findings to NHTSA. The primary responsibility of the participating company is to implement the program in one plant (called the "experimental plant") over a nine-month period, utilizing the educational materials. At another plant of the company, called the "control plant," no educational program will be conducted, but will be included in the evaluation plan.

A suggested plan to implement and evaluate the safety belt education program for employees over a nine-month period is presented below. The nature and extent of the actual program, of course, will be worked out with the Safety Director of the participating company.

#### Month I

An ORC representative will meet with the Safety Director of the experimental plant to discuss the educational program as outlined in the study proposal and in this document. The purpose of this meeting will be to ascertain the extent of the program which, of course, is dependent on practical considerations. At this time, ORC would also plan to review with the Safety Director all of the NHTSA educational materials to determine how they can best be utilized over the nine-month period.

At the time of the first visit and before employees have been made aware of the program, ORC will conduct the "before" observations of safety belt usage on the company's two plant grounds. If practical, ORC will also undertake observations in the local plant community of the experimental plant.

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Arrangements will be made to have NHTSA provide the appropriate number of booklets and other materials to the experimental plant.

### Month II

The second month marks the start of the educational program for employees. Early in the month, a letter in support of the educational program and signed by the plant manager should be sent to all employees along with the booklet, "The Safety Belt Message, the Student's Lesson." An announcement of the program should also appear in the plant newspaper.

The principal event during the second month will be the showing to all employees of the "self-contained," 15-minute, audio-visual presentations. The leader's booklet ("Encourage Employees to Use Safety Belts") will provide resource materials for answering questions, encouraging group discussion, etc. An ORC representative will be present at each session to provide technical assistance, for example, to help answer factual questions about safety belts.

To be effective, these meetings should be scheduled on company time, as part of the company's planned and/or ongoing efforts to educate employees in the principles of safety and accident prevention. This would include employees who normally do not attend safety meetings, such as office workers.


Immediately after each of the audio-visual presentations, the Safety Director will give each employee a copy of the booklet, "Automobile Safety Belt Fact Book." This will serve to reinforce the message of the audio-visual presentation, as employees review the arguments for wearing belts. The booklet will also provide a means of passing the message on to other family members.

Posters, which encourage employees to wear safety belts, should be placed at appropriate locations around the plant.

### Month III

At some unannounced time during the third month, ORC representatives will make a surprise visit to the company and conduct the second observation study of safety belt usage in the employees' parking area(s).

The brochure "How Many of These Fairy Tales Have You Been Told?" will be sent to employees through the in-plant mail system or by regular mail to employees' homes. The Safety Director will write a transmittal letter to accompany the brochure and will take this opportunity to announce that; over the next six months, there will be various classroom presentations on safe driving practices, with special reference to safety belts. This announcement could also appear in the local plant newspaper indicating that the presentations relating to safety belts will take place at regularly scheduled safety meetings.



Month IV

Arrange to have several late-model cars available in the employees' parking area(s). In small groups take employees out to the parking area(s) and demonstrate the proper way to fasten and wear safety belts. Show how the belts hold people in place, prevent them from being thrown from the car, and minimize the "second collision" of occupants with the car interior. Show how the belt can be adjusted for comfortable wearing.

Month V

At some unannounced time during the fifth month, ORC representatives again will make a surprise visit to the company and conduct the third observation study of safety belt usage in the employees' parking area(s).

Place a news article on safety belts in the local plant newspaper. This article might include: dramatic statistics on the effectiveness of safety belts and statistics emphasizing the need for wider national usage of belts from the Fact Book.

Month VI

The Safety Director and his assistant will hold classroom-type discussions for all employees in appropriate size groups, utilizing the format as suggested in page 2 of the booklet, "Getting the Safety Belt Message Across, A Guide for Driver Education Instructors." An ORC representative will be present to provide technical assistance.

Month VII

Place a news article in the local plant newspaper utilizing the Fact Book, such as the one entitled, "Small Children Need Special Protection."

Have employees submit articles for the local plant newspaper, telling how a safety belt saved his/her or a friend's life or how it might have prevented serious injury. Also, how proper use of a car seat prevented a child from being injured.

Month VIII

Conduct a mail survey among employees on attitudes toward and usage of safety belts. Questionnaires can be distributed through the in-plant mail system or by regular mail to employees. Set up collection boxes at appropriate locations around the plant to collect the completed questionnaires. An ORC representative will provide technical assistance in developing the questionnaire.