# CHILDREN SAFETY IN ROAD TRANSPORT EUROPEAN PROJECT EUCHIRES

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#### Abstract

The article presents the realization of European Project EUCHIRES in years 2005-2007 in which Motor Transport Institute has participated. The project consisted in carrying out activities in Poland aiming at increasing the number of children properly transported in cars - according to Act on Road Traffic regulations - in restrains adequate for child's weight and height. All activities leading to executing the main goal of this project were realized with the support of and in cooperation with the Police, Ministry of National Education and Ministry of Transport. EUCHIRES was a project co-financed by the European Commission. Motor Transport Institute was responsible for all activities undertaken within the project and its realization in Poland. The project was realized simultaneously in fifteen EU countries. The activities encompassed media campaign adjusted to each country's specificity and addressed to children (4-12 years old) and their parents. The campaign was combined with the educational programme executed in schools and kindergartens and increased police controls. These activities were recognized in Poland as social campaigns in the field of road traffic safety realized under the banner of "Armadillo club always belt up". In 2005, at the beginning of the campaign the research showed that in Poland 52% of children were transported properly in cars while travelling. All research carried out annually after each edition of the campaign indicated gradual increase in the number of children transported properly according to valid regulations. Research conducted at the end of 2007 showed that more than 80% of children in Poland were transported properly during each car trip.

Keywords: road traffic, road safety education, road safety campaign, child seat, child restrain system, EUCHIRES.

#### 1. Introduction

In years 2005-2007 Motor Transport Institute from Poland carried out 3 editions of educational awareness campaign combined with the educational programme aimed at children and their parents related to seat belt and child restrain system. This campaign was realized within the frame of the European project EUCHIRES in several European Countries. The common element of this venture was a figure of armadillo. The Armadillo concept was introduced in 2003 in Netherlands, where the first seat belt campaign focused on children of 4-12 years old was created.

Evaluation of the campaign carried out in Poland has confirmed the effectiveness of educational actions of that kind aimed at children.

In Poland children of 0 to 12 years old and no more than 150 cm in height have to travel in all motor vehicles fitted with safety systems (seat belt) restrained by child restraint system adapted to their height and weight. The child restrain system should meet the technical requirements. This applies to

cars, trucks, lorries, buses etc. In accordance with the Polish law children may not be transported using a rearward-facing child restraint system in a passenger front seat protected by an air bag.

# 2. Conception of the campaign

Conception of the campaign carried out in Poland was created in 2005. Next editions of the campaign were the continuation of this concept and the extension of the actions.

The main target groups were the children themselves and their parents. The strategy of this campaign was based on a simple guideline: to direct whole campaign to children, to make seat belt use more attractive and funny, to create positive approach and to avoid risk and fear appeals.

The campaign was based on an incentive programme leading to an important increase of the use of the seat belt among children. To make proper travelling (in child restrain system, wearing a seat belt) more attractive a gadget - toy - Armadillo was offered to children. This little animal makes it attractive for children to wear their seat belts. Attached to the seat belt with Velcro, the soft latex toy is the cheerful little children's mate for safety on the backseat. In case of danger the real armadillo rolls up to protect itself. The toy can be folded too.

The Polish campaign was based on this concept in year 2005, 2006 and again 2007. Polish campaign is known by its slogan: "Klub Pancernika Klika w Fotelikach" (in Polish) - "Armadillo Club Always Belt Up".

## 3. Parties involved

EUCHIRES campaign was co-financed by the European Commission. Motor Transport Institute was responsible for every campaign activity in Poland. Motor Transport Institute was supported in the stage of campaign strategy development and creation and in public relation activities by The Foundation for Social Communication. Police, Ministry of Education, Ministry of Transport and National Road Traffic Safety Council strongly supported our campaign.

# 4. Objectives

The campaign primary objective was to make the seat belt more attractive for children of 4-12 years old. The additional aims of the campaign were also:

- education and motivation of children in connection with safety behaviour on roads and in cars,
- positive interaction parent child in road safety field,
- convincing parents to use child restrain systems while travelling with children in the proper way.

The objectives of this action with European dimensions correspond to the objectives of the European Commission White Paper "European transport policy for 2010: time to decide". Moreover, it corresponds to the EC's indication of the main priorities to increase road safety. Increasing the usage rates of seat belts and child restraint systems is regarded as a priority issue in this respect. Thanks to this campaign, the number of road deaths and injured among children of 4-12 years old should be strongly diminished. It was essential to decrease the incorrect use of the child restraint systems and to generalize the correct use of adapted child restraint systems for all age categories until 12 years, on all seats in the vehicle. Furthermore, this project helped to attain the objectives of the European Commission to reduce the number of road deaths in Europe by 50% by 2010, and corresponds to the European Directive 2003/20/CE on the use of seat belts and child restraint systems (obligation to use a seat belt or child restraint system in function of the occupant's age and size, on any seat in the vehicle). The final objective was to bring about a permanent change in behaviour through repeated and integrated enhanced enforcement actions, and to make the use of seat belts and child restraint systems an everyday reality. Fastening the seat belts must become a safety reflex from the earliest age.

# 5. Target audience & approach

The campaign was directly aimed at children of 4-12 years old and had to make the seat belt more attractive. The campaign was also supported by information (website) aimed at adults who transport children in their cars on a regular basis. The goal was to make the public aware that there is always a risk of an accident and that drivers who transport children are responsible for the safety of these children. The message was not about the risk of not wearing seat belts but about emphasizing that it is fun to wear seat belts. This way children can even encourage their parents to wear their seat belts. The message of the campaign was educational, dynamic, and humorous, fitted to child culture and aesthetics and was also acceptable and attractive for parents. The innovative character of this campaign mainly laid in the combination of awareness raising campaign with enhanced enforcement and an incentive programme. Enhanced enforcement programmes were conducted in addition to normal enforcement practices and were coupled with a publicity or information component. A systematic review of published studies shows that enhanced enforcement programmes are effective in increasing seat belt use and decreasing fatalities.

At the same time when the awareness campaign was carried out, the information campaign was launched through the website, containing information with regard to the seat belt, the European legislation as well as the Polish legislation.

## 6. Campaign elements

Since year 2005 the whole Polish campaign has had a cheerful slogan: "Klub Pancernika Klika w Fotelikach" (in Polish) - "Armadillo Club Always Belt Up". In the year 2006 we added new part of the slogan: "Pancernik Przypomina Rodzic Zapina" (in Polish) - "Armadillo reminds and parent belt child up".

#### Press conference

Every year campaign started with the press conference. We have informed media about the project and the campaign.









Fot. 1. Press conference

# TV-spot

TV campaign was adapted to primary target group - children 4-12 years old. TV-spot appeared on nationwide television in TV time dedicated to children. TV-spot created feeling among children that using a child restrain is important, is needed and is "cool". While adults are seeing this spot they are having a feeling that this campaign is helping them to convince a child to use restrain. TV-spot was an animated short film (30 seconds) showing how to travel safely in the car. Armadillo shows how to fasten seat belts and how to a use child seat, at the end of the spot armadillo and a child - buckled up - travel together with a smile and sing a campaign song. This is of course a good example for parents as well. As mentioned before this spot had a song, which was based on a song from TV show from 70's, extremely popular in Poland, especially among parents of children aged 4-12.

### Song lyrics - translated into English:

We are seating with no worries
We are admiring the world
It is very funny
Sitting just like that
We are getting into the car
We are sitting in the chairs
We are belting up
In the Armadillo Club
You drive always belt up
Armadillo Club Always Belt Up



Fot. 2. Shot from TV-Spot

# Radio-spot

Radio campaign was based on the TV song with the campaign slogan. This radio-spot reaches the driver directly, as well as a child passenger, because it is close to people in the car, and can help them to remember that they should use seatbelts and restrains. Radio campaign was based on the TV song with campaign slogan.

# Posters, billboards

We had more than 500 billboards visible in the whole country in every year of the campaign. They reached especially cities inhabitants and they had large range. 10000 small posters were distributed in schools, kindergartens, driving schools, police offices. On billboards and posters there were picture symbol of the campaign, the slogan and information about website.









Fot. 3. Posters







Fot. 4. Billboards in Polish cities

### Website

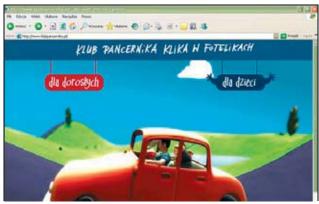
Campaign website has an internet address: www.klubpancernika.pl. Website was a supporting medium and a major source of important information about the campaign.

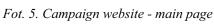
Website was divided into two parts - one directed to children and second directed to parents and adults. On the website we had:

- materials for children,
- materials for parents,
- materials for schools and kindergartens,
- materials for journalists about the campaign.

In the part dedicated to parents we had all information about using a child seat in a correct way. We also had a special platform - forum, where parents could exchange their experiences related to correct transportation of children. On pages dedicated to schools and kindergartens we have prepared special for this campaign scripts for teachers, which could help them to carry on the classes. We had scripts for kindergartens, for primary schools classes: 1-3 and 4-6. We have also prepared scripts for teachers concerning different road safety issues. On pages dedicated to journalists we had press releases and campaign products.

On pages dedicated to children we had drawing competition, essay competition, an armadillo club ID - for children obeying traffic rules related to child seat, school schedule board and information about armadillos, wallpapers. On the website we had also interactive games for children.







Fot. 6. Interactive game

### Brochures, leaflets

The leaflet of the campaign was a board game or "memory game" for children. On the leaflet we also had information for parents on children seats and child restraint systems and the campaign. It was distributed in kindergartens and schools. This leaflet was an addition to the biggest Polish newspaper and was given to children with armadillos by policemen as well.





Fot. 7. Leaflet

## Distribution of the Armadillos

Armadillos were distributed during every edition of the campaign by policemen. There were increased police controls on the streets specially dedicated to the problem of child safety in cars. Together with armadillos policemen have handed out the leaflets-games. Armadillos were also given as the awards in the various competitions.

#### 7. Actions

# Kindergartens and schools actions

On the campaign website, in the part dedicated to schools and kindergartens we have prepared special for the campaign scripts for teachers which helped them to carry on the classes. We had scripts for kindergartens, for primary schools class: 1-3 and 4-6. For the second part of the campaign we have prepared new scripts for teachers concerning different road safety issues. Trainings for teachers were carried out informing them how to take advantage of this scripts with help of teachers' trainer. Every school and kindergarten which wanted to have classes about safety in child seats have received from us games - leaflets, posters and a few armadillos for different competitions dedicated to campaign problems. Very often children have received awards and congratulations from policemen. In some schools policemen have carried out the classes about road safety and child safety issues. All actions in schools and kindergartens were supported by Ministry of Education.





Fot. 8. Actions in kindergartens and schools









Fot. 9. Classes in kindergarten with parent

#### Police actions

Police actions were supported by controls combined with awareness-raising actions, exclusively based on the use of the seat belt among children. During these controls policemen handed out armadillos and leaflets with information on correct usage of child restrain system, which seat id proper for what age and what are the legal requirements. This enhanced enforcement was combined with intensive public relation activities. The regional police departments have always organized press conferences and regional TVs and radios have participated in actions on the streets.







Fot. 10. Distribution of the armadillos

## 8. Running period of the campaign

We have started our campaign in year 2005. The first edition of the campaign took place in November 2005. Second and third editions of our campaign took place in July - August 2006 and July - August 2007.

## 9. Evaluation of changes

In order to evaluate campaign efficiency appropriate research were carried out before and after every edition of the campaign. Research methods like qualitative and quantitative tests were used in this project.

In year 2005 before first EUCHIRES campaign public opinion research centre carried out for Motor Transport Institute quantitative tests (among adult road users) and qualitative tests (focus group investigations among children and their parents).

The aims of these tests were:

- to specify seatbelt wearing rate for drivers and passengers and child restrain use,
- to describe how children (4-12 years old) are transported in cars,
- to describe the level of knowledge about child restrain system,
- to characterize attitudes of children and their parents towards child restrain system.

Main results of the pre-test - 2005

Tab. 1. Seat belt use among drivers and passengers in the public opinion test

| Wearing of the safety belt   | %  |
|------------------------------|----|
| Drivers                      | 81 |
| Passengers in the front seat | 80 |
| Passengers in the back seat  | 29 |

Tab. 2. Using of child seats in the public opinion test

| age of child | correctly% |
|--------------|------------|
| 0 - 1        | 79         |
| 1 - 4        | 74         |
| 4 - 12       | 53         |

The test of the public opinion among adults and children aged 4-12 was carried out after the campaign evaluation. This test was based on the common questionnaire created for EUCHIRES project. Tests included:

- safety belt wearing rate among driver and passengers and child restrain system rate,
- description of attitudes towards safety belt,
- campaign evaluation and campaign remembrance in media channels.

The post-test showed that after the Armadillo campaign in Poland, in year 2005 usage of seat belt and child restrain system has increased.

Seat belt wearing rate:

- among drivers increase by 8%,
- among passengers in the front seat increase by 7%,
- among passengers in the back seat increase by 18%.

Using of child restrain system while transporting children has increased by 8%.

Main results of the 2005 test - after the first EUCHIRES campaign

Tab. 3. Seat belt use among drivers and passengers in the public opinion test

| Wearing of the safety belt   | %  |
|------------------------------|----|
| Drivers                      | 89 |
| Passengers in the front seat | 88 |
| Passengers in the back seat  | 48 |
| Male                         | 85 |
| Female                       | 90 |

Tab. 4. Using of child seats in the public opinion test

| age of child | correctly% |
|--------------|------------|
| 4-12         | 61         |

The post-test showed that after the 2006 armadillo campaign seat belt wearing rate has insignificantly decreased but using of child restrain systems has increased substantially. Seat belt wearing rate has decreased:

- by 4% among drivers,
- by 8% among passengers in the front seat
- by 8% among passengers in the back seat.

Usage of child restrain system among children aged 4-12 has increased by 18%. At the same time roadside survey showed also that there was some insignificant decrease in seat belt wearing rate among passengers. However the seat belt wearing rate is still higher than it was before the first EUCHIRES campaign in 2005. In relation to passengers in the back seat this increase was about 11%.

Main results of the 2006 test - after the second EUCHIRES campaign

Tab. 5. Seat belt use among drivers and passengers in the public opinion test

| Wearing of the safety belt   | %  |
|------------------------------|----|
| Drivers                      | 85 |
| Passengers in the front seat | 80 |
| Passengers in the back seat  | 40 |

Tab. 6. Using of child seats in the public opinion test

| age of child | correctly% |
|--------------|------------|
| 4 -12        | 69         |

The post-test showed that after the Armadillo campaign in Poland, in year 2007 usage of seat belt and child restrain system has increased.

Seat belt wearing rate:

- among drivers increase by 2%,
- among passengers in the front seat increase by 2%,
- among passengers in the back seat increase by 6%.
   Using of child restrain system while transporting children has increased by 8%.
   Usage of child restrain system among children aged 4-12 has increased by 14%.

Main results of the 2007 test - after the third EUCHIRES campaign.

Tab. 7 Seat belt use among drivers and passengers in the public opinion test

| Wearing of the safety belt   | %  |
|------------------------------|----|
| Drivers                      | 87 |
| Passengers in the front seat | 82 |
| Passengers in the back seat  | 46 |

Tab. 8. Using of child seats in the public opinion test

| age of child | correctly% |
|--------------|------------|
| 4-12         | 83%        |

# 10. Attitudes towards wearing safety belts

Both drivers as well as passengers are using seat belts more often when they travel outside urban area. Parents are also declaring that they are buckling up their children more often while traveling outside urban area. The reason for such situation is that the journey is longer and the need to feel secure and the risk of fine is higher.

Women more often than men are using seat belts. They have a better knowledge of traffic regulations concerning seat belts and child restrain system.

The age of drivers has insignificant impact on seat belt use. The highest seat belt wearing rate is among drivers aged 40-49. The lowest seat belt wearing rate is among drivers aged 25-29. Among passengers young people are using seat belt least often.

People with primary education have better knowledge that seat belts are obligatory - 100%. Among people with university education this knowledge is smaller - 94%. However people with university education have better awareness of danger if seat belts are not used - 95%. Among people with primary education only 60% is aware that traveling without seat belts can be very dangerous. This fact affects the concern for children. Almost 80% of people with university education declare that they are checking if children are correctly protected inside the car. Only 40% of people with primary education are checking if children are correctly protected in the car.

Almost 100% of all tested people are aware of the fact that using seat belts in the front seats is obligatory. 94% of all tested people are aware of the fact that using seat belts in the back seats is obligatory.

After 2007 campaign 94% of all tested people considered not using seat belts in the front seats as very dangerous and dangerous (after 2005 campaign it was 91%). 81% of all tested people considered not using seat belts in the back seats as very dangerous and dangerous. Especially young people 18-24

and people with university education are aware of the fact how dangerous it is to travel without seat belts. 84% of all tested people declared that they would ask the passenger in the front seat to buckle up. 55% of all tested people declared that they would ask the passenger in the back seat to buckle up.

After 2007 campaign 67% of all tested people stated that there is a risk of fine if they are not buckled up (after 2005 campaign it was 64%). Younger children, 4-6 years old, rarely buckled up themselves - 34%, but older children, 7-12 years old buckled up themselves very often - 73%. 23% of children ask for help with buckling up. 78% of parents make sure that their child is buckled up in the built-up area and 85% of parents make sure that their child is buckled up outside the built-up area.

# 11. Evaluation of the campaign

#### Parents test

90% of all parents evaluated this campaign as very good or good.

75% of parents declared that campaign convinced them to using child seats.

25% of the parents have stated that they were convinced to use child seats before campaign.

| Campaign evaluation | %  |
|---------------------|----|
| credible            | 82 |
| informative         | 84 |
| clear               | 84 |
| good looking        | 82 |

Tab. 9. Evaluation of the campaign

#### Children tests

Vast majority (81%) of all children evaluated this campaign as very good or good. Kids liked the armadillo gadget very much - 90%.

90% of parents evaluated this campaign as good and very good. 82% of parents stated that this campaign was credible, informative, clear and good looking.

### 12. Conclusion

The armadillo campaign was directly aimed at children of 4-12 years old and its goal was to make seat belts more attractive. The innovative character of this campaign mainly lies in the combination of awareness raising campaign with enhanced enforcement and an incentive programme. The school actions were quite successful. There were lots of schools and kindergartens asking for leaflets and armadillos. We do not have sufficient amount of armadillos for children since Poland is a big country and we need more than 2 million of armadillos to be distributed to half of all children in Poland aged 4-12.

Results of the campaign evaluation were satisfactory. Most of parents were convinced to use the child restrain system while travelling with children. The post-test showed (public opinion poll) that after campaign using of seat belt and child restrain system has increased in Poland. Now 83% of children is transported in cars in child restrain system (increase by 30% within three years).

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