

**International perspective of
Road safety in Poland
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Purpose of international comparisons

- Where are we standing?
- Potential margin for improvement
- Possible reasons for differences
- Might we learn from others what to do?
- How long it might take to improve?
- Who should we compare too?
- What issues, measures to compare?

Areas of comparison

- Selected transport indicators
- Road accidents experience
- Safety belt use
- Transport of young children
- Drink- driving
- Speeding
- Safety concerns
- Public support for specific policies

road transport variables

Indicators	PL	NL	SE	UK	CZ
Population, mil.	38	16	9	59	10
% living in small townships < 105 pop. 2005	44% 35%	4%	22%	1%	44%
Active drivers, mil.	11.3	6.6	5.1	28.4	3.8
No. of vehicles, mil.	16	8.4	5.0	32	4.8
Vehicle age > 10 y % 2005	34% 55	14%	31%	14%	28%
Motorization veh / pop	421	525	555	542	480

Composition of driving population

	PL	NL	SE	UK	CZ
Active drivers / pop	30%	41%	57%	49%	38%
Women drivers 2005	23% 27%	42%	48%	42%	36%
Young drivers < 24 % 2005	15% 11%	10%	11%	6%	12%
Older drivers > 55 % 2005	17% 23%	27%	28%	34%	20%

Experience of driving population

	PL	NL	SE	UK	CZ
Driving experience up to 5 years %	23%	13%	13%	8%	20%
Annual Km driven < 5000 %	31%	25%	27%	19%	48%
Annual Km, mean (in 10 ³) 2005	14 18	15	15	19	10

Summary of descriptive variables

- Urbanization level in Poland still low
- Motorization level near 80% of SUN countries
- Large part of vehicle fleet is old
- Many people do not drive
- Many of these people are women
- Twice as many new drivers compared to SUN
- Many people drive less than 5,000 km annually
- SUN countries are very similar on most derived variables
- Poland and CZ are more similar to each other than to SUN

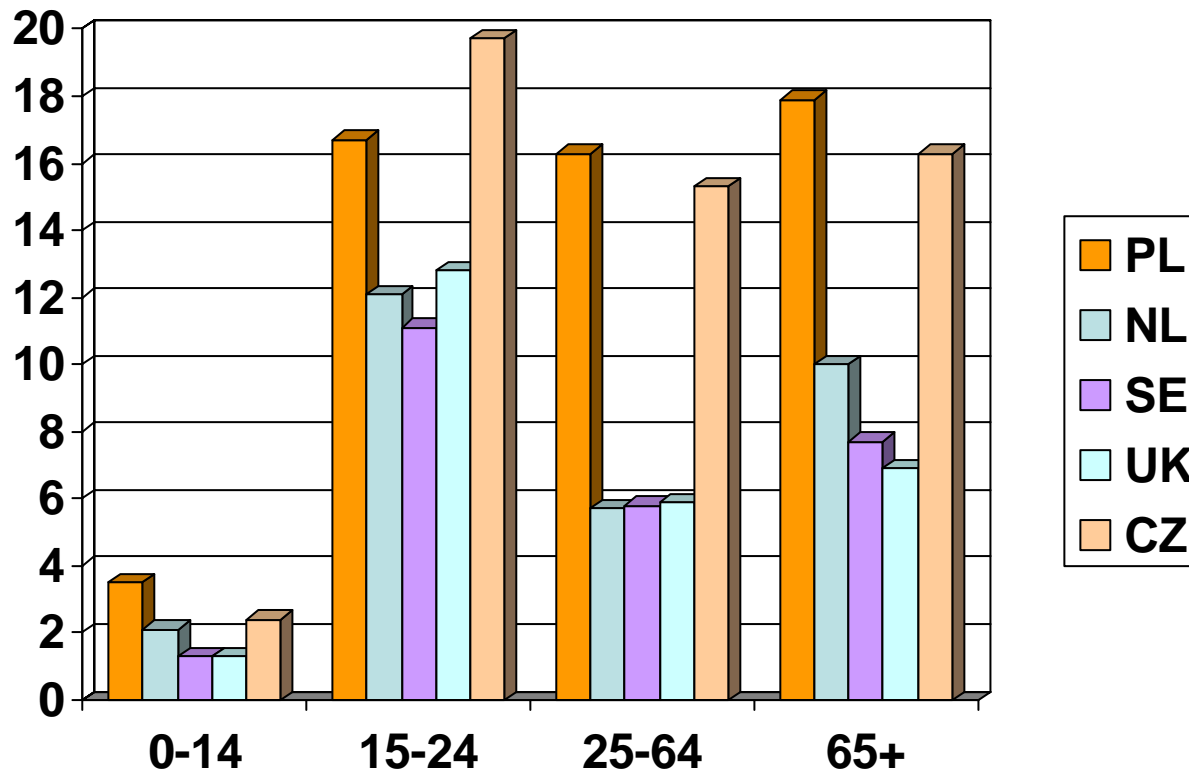
Traffic fatalities and self-reported accidents

	PL	NL	SE	UK	CZ
Fatalities (2003-4)	5657	1088	489	3508	1447
Fatalities / 10 ⁶ pop	143	62	65	59	130
Fatalities / 10 ⁹ vehicle-km	31.4	8.3	8.2	7.3	32.3

Reported Injury accidents in last 3 years (% of drivers)	5%	5%	5%	6%	9%
Reported Damage only acc. in last 3 years (% of drivers)	25%	20%	20%	17%	24%

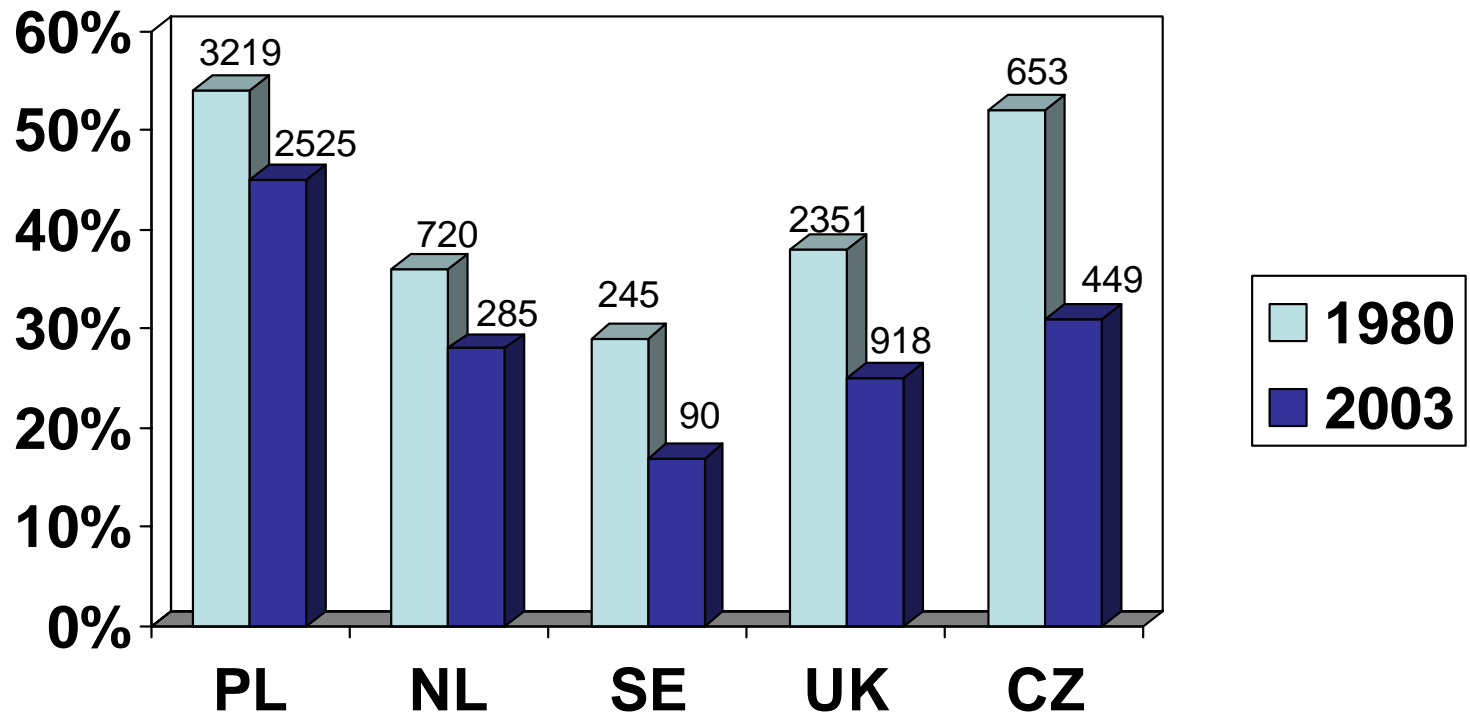
Population risk by age groups (2003)

Fatalities per 10^5 pop.



Vulnerable road users

Pedestrians and bicyclists
fatalities out of total



Where are the gains in safety?

	PL	NL	SE	UK	CZ
% urban fatalities 2003	46%	22%	19%	28%	35%
% urban fatalities 1980	?	34%	31%	48%	51%
% improvement on urban roads	?	66%	62%	65%	19%
% improvement on inter-urban roads	?	40%	27%	18%	-50%

Summary of road accident comparisons 1

- Population fatality risk rates in PL & CZ double compared to SUN countries
- Poland (and CZ) has very high fatality risk at every age group except 0-14
- In SUN countries 15-24 age group has the highest fatality risk
- Travel risk rates in PL and CZ are four times as high as in SUN countries
- Similar rate of **reported** accident experience in all comparison countries; Paradox?

Summary of road accident comparisons 2

Pedestrians and bicyclists are hit in PL more so than in SUN countries

Vulnerable road users in PL and CZ are as in SUN countries 25 years

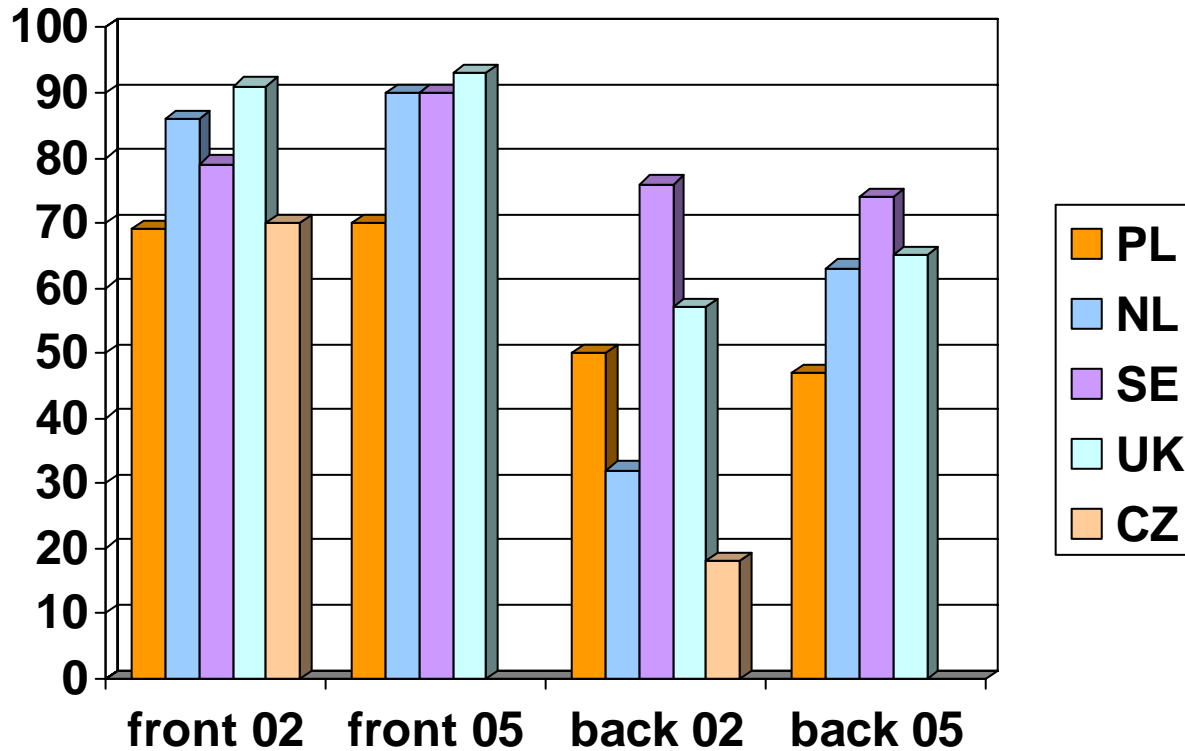
Over 25 years SUN countries reduced urban fatalities by 65%

Inter-urban fatalities were reduced 18%- 40%

Very large improvement potential in PL on Urban and Inter-urban roads

Safety belt use and opinions

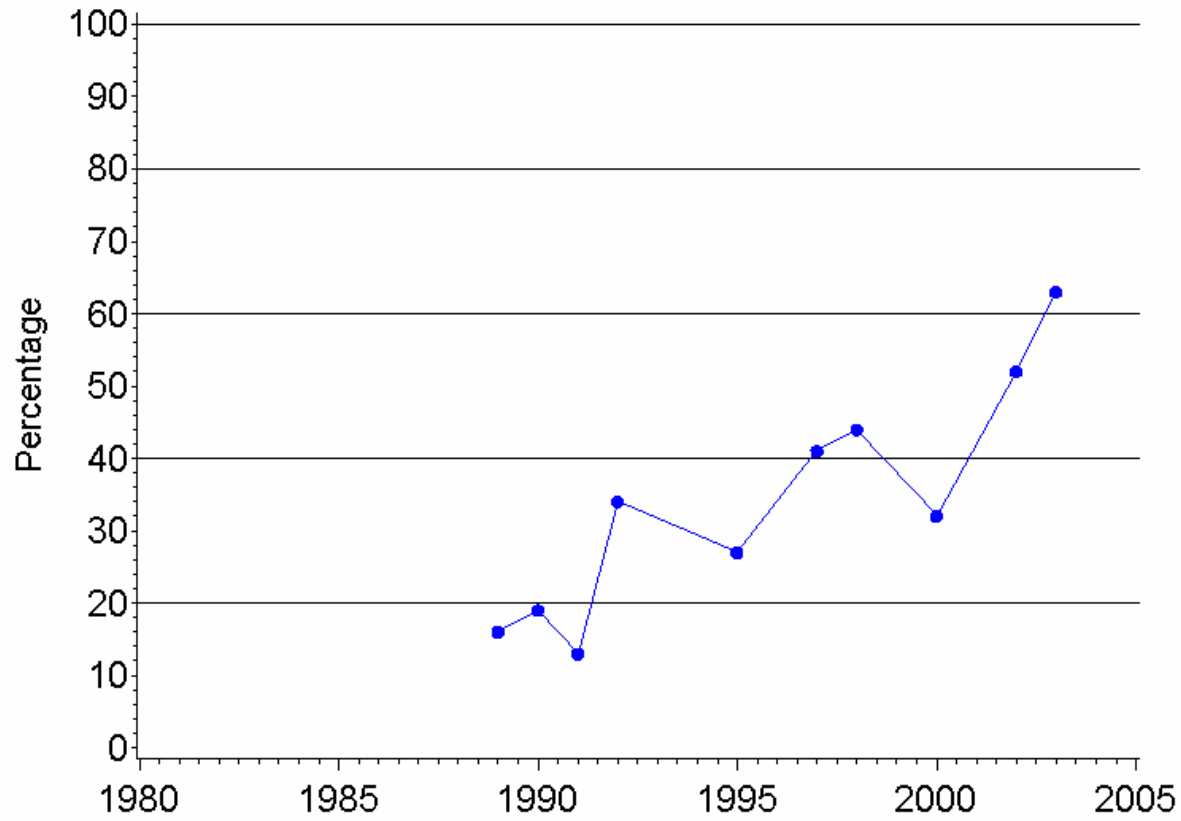
Safety belt use (counts by observers)



Safety belt use by car occupants, seating position, gender, and age group (Polish data)

Passenger cars	Sex	Elderly [%]	Adults [%]	Youth [%]	Children [%]
Driver	Women	84	77	72	
	Men	81	68	66	
Front seat occupants	Women	92	76	70	79
	Men	76	64	56	84
Back seat occupant	Women	39	40	38	77
	Men	45	31	29	74

Seat belt usage on rear seats



Source: SWOV (< 1999) / AVW

Opinions about belt use in SARTRE 3 and 2005 survey

% agreeing with statement	PL	NL	SE	UK	CZ
No need if one drives well 2005	26 22	11	12	11	28
Feel strange when not belted 2005	68 62	74	82	79	55

Why NL and UK car occupants use, or not use, seat belts

Reason	NL drivers	Reason	UK back passengers
It can be dangerous	3%	Never use against*	12%
Discomfort or	20%	Discomfort or	28%
Unnecessary situation	10%	Unnecessary situation	15%
Forgot	46%	Forgot	45%

Summary of seat belt use and opinions 1

- Belt use rates in Poland lower by 20% points than in SUN
- Getting to over 90% use rate in urban areas is a slow process
- Back seat belt use 20%- 25% points lower than in the front
- Increasing back seat use rate in SUN took many years
- Self- reported use rates similar to observed rates
- Enforcement is mainly secondary and sporadic

Summary of seat belt use and opinions 2

- Most people internalized the importance of using safety belts
- Some people feel that in certain situations one can safely ignore the belt
- Few people have strong objections to wearing belts
- Forgetting and inconvenience major reasons for non-use
- Polish drivers and passengers did not develop a strong habit yet

Summary of seat belt use and opinions 3

Similar patterns of use and opinions in all countries:

Lower use rates on short urban trips

Women use belts at a higher rate than men

Young adults use less, elders use more

Taxis, utility vehicles and trucks show considerably lower use rates

Polish drivers are younger, mostly men, and many drive old cars-

These are factors that correlate with lower use rate

The transport and protection of children in cars

Children killed on roads by age group and mode of travel

	Fatalities (mean of 5 years)	Rate per 10 ⁵ of population in age group			Rate per 10 ⁵ of population of 0-14 age group		
		0-5 age	6-9 age	10-14 age	Pedestrian	Car	Bike
PL	333	3.50	5.11	5.25	2.14	1.29	0.55
NL	62	1.24	1.73	3.62	0.44	0.51	1.09
SE	25	0.84	1.45	2.46	0.35	0.76	0.22
UK	208	1.16	1.60	2.81	1.01	0.48	0.28
CZ	51	1.98	3.31	3.23	1.20	1.06	0.44

The issues of child protection in cars

- Do parents accept the responsibility?
- Do children travel secured in CRS?
- Are CRS being used properly?
- What are the reasons for non-use or incorrect use?

Observed and reported CRS use

Use of CRS (%)	PL	NL	SE	UK	CZ
CRS use observed 2004	75	94	88 90	76 92	

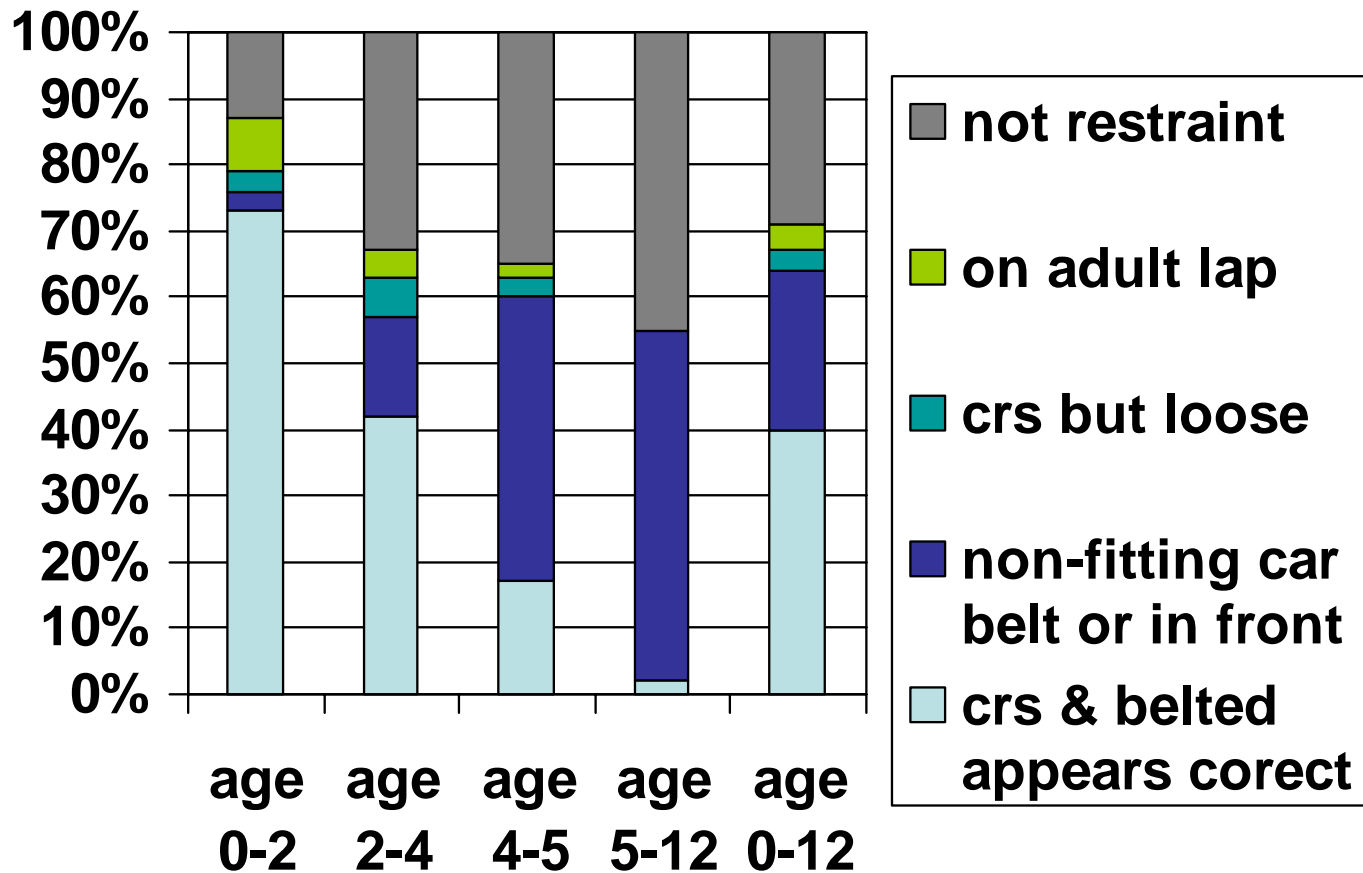
Report always use CRS with children 2005	81 90	84	94	97	60
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Reported, observed and correct use of CRS by age group

Age groups	PL Reported use	PL Correct Use estimated	UK Observed use	UK Correct use observed
0-1 year	93	80	98	56
1-4 years	91	67	97	40
5-12 years	90	44	86	?

CRS use by type and age group

(Israel, 1995, in- car observation)



Universal reasons for transporting children unrestrained

- Confusion about correct method
- Child too small or too large for available seat
- Child Seat not secured to car seat
- Practical reasons: guests, many kids, no space
- Refusal or avoiding by the child
- Restraining effort too large relative to trip

Car occupancy by children and adults

(only in cars carrying children, Israel, 1995)

In 51% of vehicles 1 child + adults
In 32% of vehicles 2 children + adults
In 17% of vehicles > 3 children + adults
In 13% of vehicles non family children

Use and fit of CRS

Large gap between apparent use of CRS and proper protection of children

At least 50% of children are not properly restrained

Use of proper child restraints diminished with age of child up to near adult size

Children of 5 to 9 years old are least restrained or protected

Guest children less likely to be restrained

Single child twice as likely to be transported properly

Summary of CRS situation 1

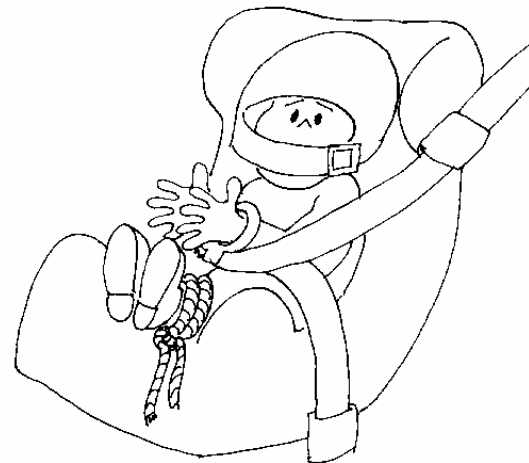
- Parents aware about restraint laws regarding CRS
- Parents know the reasons and justify the law
- In the 2005 survey polish parents reported 90% use rate
- Proper and consistent use could be as low as 50%
- Children 5-12 are least protected but travel most
- Many parents don't know about Booster seats

Summary of CRS situation 2

- There are many CRS usability issues in the way of proper use
- Lack of space a common reason for too early graduation to an “older” CRS
- Large shifts in use with age, technology and methodology
- Special needs of children with disabilities not well addressed
- Many older model Seats and Carriers in use
- Increase in safe transport of children is likely to be slow

We know children, don't we?

Keeping a child restrained reflects a momentary balance between parents' sense of responsibility for the child's safety, the need to reduce the effort involved in preparing a child for a trip, and the wish to avoid conflicts over issues of seating and comfort.



Drink- driving

Drinking practices and laws

Practice	PL	NL	SE	UK	CZ
Alcohol L / Capita	9	10	7	11	12
Legal BAC ‰	2	5	2	8	0
RBT	no*	yes	yes	no	yes

Report drinking regularly	23%	57%	35%	57%	44%
	2005	24%			
Abstainers	29%	22%	12%	24%	15%
	2005	35%			

Reported drink- driving and enforcement experience

Experience	PL	NL	SE	UK	CZ
Report drink- driving % 2005 data	2.5 5.0	6.3 3.9	0.9	1.9	7.4
Report checked in last 3 years % 2005 data	22 3	38	41	9	31
Think alcohol check likely % 2005 data	11 10	16	12	8	33
Report getting DUI ticket (3 y) % 2005 data	0.6 0	1.0 < 1	0.5	0.2	2.0

Opinions about drink- driving

Opinions	PL	NL	SE	UK	CZ
Agree to 0 BAC limit	75	57	70	51	58
Support DUI rehab courses % 2005	88 52	73	89	81	52
Support > penalties for DUI % 2005	86 91	95	92	94	91

Summary of drink- driving practices and opinions

Amount of Alcohol drinking in Poland no more than in other countries

Fewer Polish drivers are regular drinkers, compared to SUN and CZ drivers

More Polish drivers claim to be abstainers

NL and CZ drivers report the highest rates of drink driving

In all countries, d- d involves more men than women, more single people, and young people.

Drivers know that drinking and driving don't mix well

Polish drink- driving attitudes are quite "pro safety" compared to SUN and CZ

Drink driving enforcement

Polish drivers and non- drivers support 0 BAC and RBT
Drink- driving Enforcement in Poland moderate
compared to others

Young drivers more likely to be checked and ticketed by
police

In countries with RBT many more drivers experience
police checks

Demonstration of the impact of RBT on prevalence of D-D

Number of RBT and % of d-d in Amsterdam, 1994-2000

Year	Level of random surveillance (number of tests)	share of drinking drivers
1994	35,000	7.8%
1995	80,000	6.7%
1996	85,000	5.7%
1997	90,000	5.2%
1998	90,000	4.7%
1999	35,000	7.0%
2000	35,000	6.8%

Best Practice of effective D-D enforcement

- A very high level of police surveillance
- Highly planned organization and operational procedures
- Random testing
- Highly conspicuous testing operations
- Extensive publicity accompanying the random testing operations;
- Report results of testing operations
- Report actual impact of enforcement efforts

Speeding behavior

Prevalence of speeding

Where / % speeding	PL	NL	SE	UK	CZ
Observed speeding on urban roads	82	75	54	40	
Reported speeding on Urban roads	11	14	14	8	7
Observed speeding Inter-Urban	46	54	52	50	
Reported speeding on main roads	13	22	27	13	12
Report <u>other</u> drivers as speeding	91	87	81	92	84

Speed enforcement

Issue	PL	NL	SE	UK	CZ
Speeding tickets (in mil.)	0.9	5.6	0.1	1.1	?
Report getting speed ticket (3 y) 2005	17 35	46	9	9	21
Think speed check likely 2005	39 45	58	29	68	60

Summary of speeding behavior and enforcement

About 50% speeding rate, in all countries, all type roads
Drivers in all countries believe they speed mostly on inter-urban roads

PL and NL over 75% speeding on urban roads

Drivers in all countries perceive themselves as speeding a little

Other drivers seen as speeding a lot

In SUN countries many urban traffic calming schemes

In NL and UK massive camera based speed control

Public support for speeding control

Issue	PL	NL	SE	UK	CZ
Support > penalties for speeding 2005	46 56	48	39	67	78
Support for speed cameras	44	29	20	37	20
Support for owner responsibility 2005	24 66	33	12	21	22
support "no speed in vehicle ads"	38	36	24	54	31
Enjoy fast driving 2005	45 39	32	42	29	35

Obstacles to speed control by enforcement

- Most drivers don't see themselves as speeders; it is the "other driver"
- Information and punishment of other drivers may not be relevant
- Traditional speed enforcement can't raise expectation of control sufficiently
- Many, but not all, Polish drivers, support tougher speed enforcement
- Speeding is seen as mainly a problem of inter-urban roads
- Speed limits are too high
- Traffic calming schemes achieved more than enforcement
- Over a third of drivers in each country actually enjoy fast driving

General safety concerns and opinions

General safety concerns and opinions

Concern about general road safety

% drivers who:	PL	NL	SE	UK	CZ
Worry about accidents 2005	91 95	79	46	87	83
Worry about crime 2005	85 93	91	64	91	88
Worry about congestion 2005	91 92	65	26	81	56

Support for safety measures

% drivers who support:	PL	NL	SE	UK	CZ
Training 2005	87 80	69	57	81	79
Enforcement 2005	85 76	65	52	74	91
Campaigns 2005	84 84	68	56	73	60
Better roads 2005	99 99	76	87	93	98
Cycle lanes 2005	91 61	76	78	67	83

Summary of concerns and support for safety measures

Polish drivers are highly concerned about road safety but also about other issues

Women drivers and older drivers show more concern than men or young drivers

Most Polish drivers feel that road safety situation has not improved over last three years

Majority of Polish drivers support all general safety policy measures

Majority of Polish drivers support several specific safety measures in areas of: speed control, RBT for D-D, pedestrian protection, road and street design and maintenance, financing, professional driving and biking facilities.

SUN drivers give less enthusiastic support to general government policies