



INSTALLATION OF CRS WITH VEHICLE SEATBELT COMPLEMENT OF PRESENTATION

GRSP Informal group on CRS – Phase III

Philippe LESIRE – LAB - 31st of August 2017

Data source : compilation of 3 surveys (BSRI2011, BSRI2014, DAL2015)

- Original sample of observations: 3893 children
- During the presentations two sets of questions and 1 remark for further analysis
- After the meeting : one request (sent by multi partners)

First set of questions on previous analysis

CRS type	Installation misuse
CONVERTIBLE CRS	<p>57/208 27,4 % % installation misuse similar for FWD and RWD facing installations</p>

Data source compilation of observation databases (2011-15)

Why misused?

What kind of misuse

Analysis

REASONS: 23 of 57 cases with reasons known:

« Human reasons »:

6 – did not know that it was misused

5 - Didn't pay attention / In hurry

2 – Reinstalled the CRS for this journey (change often of vehicle)

4 – comfort / resistance of the child

« Technical reasons »:

3 - it's too difficult

1 - bad quality of CRS

1 - seatbelt insufficient length

1 – lack of space

Categorisation of installation misuse (1/2)

KIND OF MISUSE:

- ***57 convertible CRS with installation misuse***
- ***82 installation misuse observed***

5 categories:

- ***CRS NOT ATTACHED***
- ***Wrong vehicle seatbelt route (independent from CRS)***
- ***Seatbelt performance misuse (slack and twists)***

Slack in seatbelt for CRS attachment (NFS)

A little bit of slack in diagonal belt

Large amount of slack in diagonal belt

Seatbelt twisted for CRS attachment (NFS)

diagonal belt - more than 2 twists

lap belt - more than 2 twists

.../...

Categorisation of installation misuse (2/2)

KIND OF MISUSE: 57 convertible CRS with installation misuse – 82 installation misuse observed

- Relatively minor CRS adjustments

locking devices are not used

one locking system not locked

wrong vehicle seatbelt buckle used

- Major CRS adjustments

wrong seatbelt route to restrain the CRS (NFS)

seatbelt routed in places that have not been designed for - NFS

seatbelt route used is dedicated for another facing direction

only one seatbelt strap is used to restrain the CRS

seatbelt not restraining the top of the CRS

seatbelt only restraining the back (or backrest) of the CRS

ANALYSIS

KIND OF MISUSE: 57 convertible CRS with installaton misuse – 82 installation misuse observed

Category of installation misuse	Consisdering all misuses (n=82)	Only considering the more severe of each installation (n=57)
<i>CRS NOT ATTACHED</i>	4%	5%
<i>Wrong vehicle seatbelt route (independent from CRS)</i>	1%	0%
<i>Relatively minor CRS adjustments</i>	24%	23%
<i>Major CRS adjustments</i>	40%	53%
<i>Seatbelt performance misuse (slack and twists)</i>	30%	19%

Second point on previous analysis

CRS type	RWD FC installation
REAR INFANT CARRIER	87,0%

Data source compilation of observation databases (2011-15)

FWD FC known by parents?

Analysis

Are people aware that the RIC should be Rearward facing installed (35 cases)

24 reasons given

5 - people did not know

1 – seatbelt too short

1 – no user manual + not possible to see the baby when RWD FCC

3 – Inattention or someone else installed the CRS (husband)

4 – complexity

2 – short distance

3 – Baby is crying RWD FC

2 – In hurry

1 – Not the usual car

1 – CRS of bad quality

1 – Baby buckled himself !!! (6month old)

Analysis

Reasons given by parents when the RIC is not attached : 14 cases

7 with reasons given:

3 - it's not their usual car

1 - it's only for this trip, in normal time it is restrained

1 - did not know that it was mandatory to restrain children in the back

1 - short trip

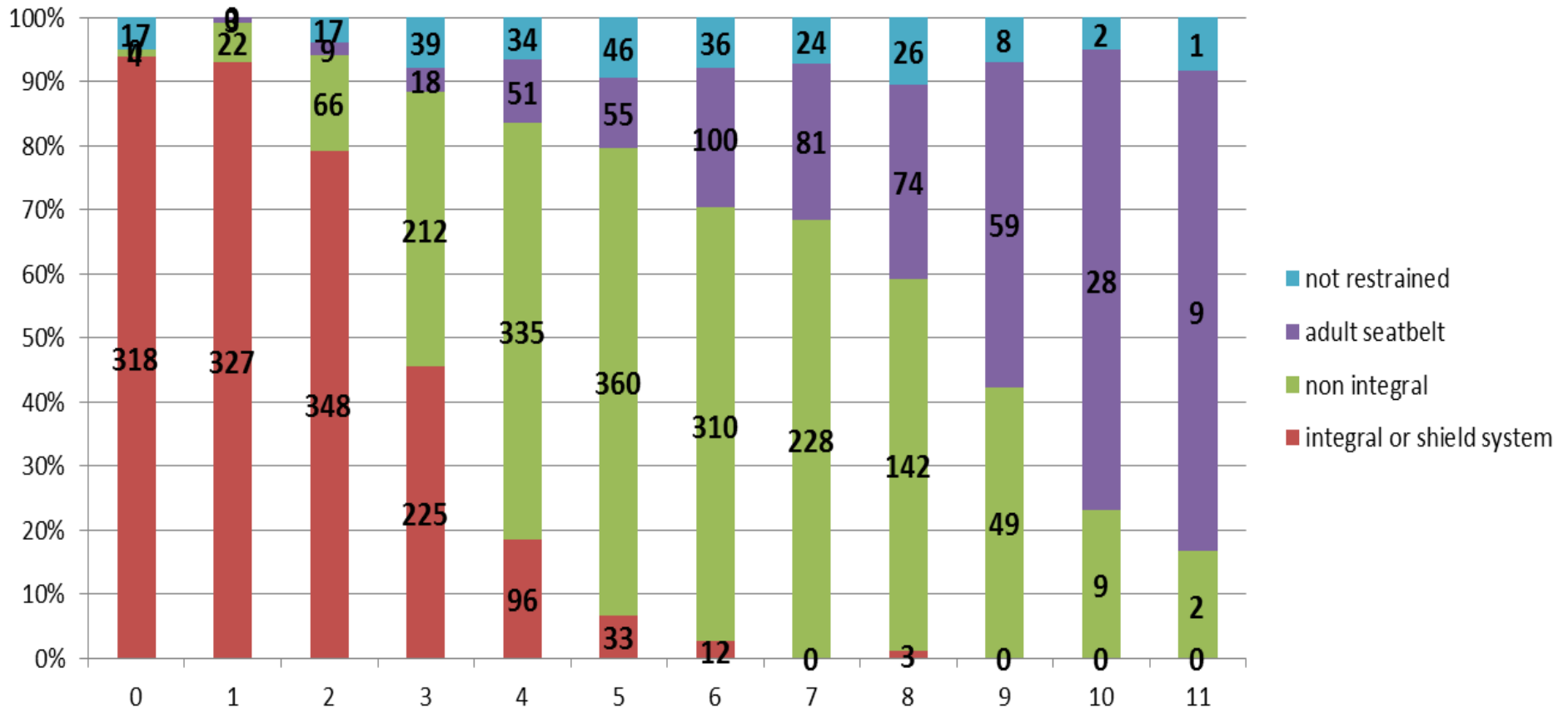
1 - lack of space

Third question on previous analysis

Is it possible to see when transfert from integral to non integral is made by parents/children?

Analysis

Children under 12 with age and restraint system type known: 3838



Data source compilation of observation databases (2011-15)

Post meeting request on previous analysis

Is there any cases of RIC carrier on a belted base for which the misuse of restraining at the same time the base and the module with the seatbelt has been observed ?

Misused belt installation,
w/o ISOFIX and support leg



Post meeting request on previous analysis

!!! - 13 RIC on belted base observed - !!!

7 cases with misuse of installation = 8 misuse observed

Compatibility CRS / vehicle (support leg)

Seatbelt straps are inverted (X2)

Seatbelt is only restraining a part of the base/CRS

Other wrong seatbelt route NFS

Seatbelt not restraining the back of the CRS

Seatbelt twisted – lap belt part more than 2 twists

Slack in seatbelt NFS

Post meeting observation

Need to well define our terminology

