Towards a safer society

Sofia, November 22th 2018
Agenda:

- Introduction
- Vias institute
  - General information
  - Mission
- Key Figures Road Safety Belgium
- The four killers
- Other Road Safety initiatives of Vias institute
I. Introduction

Mark Tant, PhD:

- Responsible Cara Department: Centre for Fitness to Drive of Vias institute
- Senior Researcher
- Expert Vias
II. Vias institute
Mission

- Vias institute is a knowledge centre that aims to reduce societal risks through sustainable behavioural change.

- We have been working for more than 30 years in the field of road safety. As from now, our expertise will be extended to the domains of mobility, security and health care.

- Vias institute carries out research, gives advice, develops innovative technologies and gives trainings.

- Our stakeholders and customers are citizens, policy makers, public authorities and companies, both nationally and internationally.
Vias institute: some key figures

- Our 135 experts include academic researchers, field experts, engineers, criminologists, psychologists, trainers as well as driver improvement coaches, legal advisors and consultants
- This variety of expertise is our strength
- Revenue **15 Mio €**
  - 60% government and 40% business
Our organisation

Road Safety  Mobility  Security  Health

Research  Innovation  Labs
Regulatory  People & Behaviour  Consulting
III. Key Figures Road Safety Belgium

*Objective EGSR 2011*

- **Objective 2015 -25%:** 630 deaths 30 days
- **Objective 2020 -50%:** 420 deaths 30 days
Evolution and measurements in Belgium

Source: SPF Economie DGSIE / Infographie: IBSR

- 1971: Présence de la ceinture à l'avant dans les nouveaux véhicules - 90 km/h hors agglomération lorsque 3 bandes ou moins
- 1972: Record historique 3101
- 1973: Crise pétrolière : 80 km/h & 100 km/h - Dimanches sans
- 1974: 120 km/h sur autoroutes et routes 2x2 bandes, 90 km/h sur autres routes
- 1975: Ceinture obligatoire à l'avant - Enfants à l'arrière - alcool : 0,8 ‰ - 13 infractions graves
- 1976: Casque obligatoire pour les cyclos B
- 1977: Examen pratique au permis de conduire
- 1978: Zones résidentielles
- 1981: 14 infractions graves
- 1984: Feux de croisement obligatoires de jour pour les motos et cyclos
- 1988: Zone 30
- 1989: Permis de conduire moto et cyclo
- 1991: Ceinture obligatoire à l'arrière
- 1992: 50 km/h en agglomération, 90 km/h sur les routes 2x2
- 1994: Alcool : 0,5 ‰
- 1996: Priorité des piétons sur passages pour piétons - Siège
- 1997: Ronds-points prioritaires
- 1998: Nouveau permis A pour moto - Radars
- 1999: Législation drogue
- 2000: Kit main libre
- 2003: Casque pour tous les
- 2004: Amendes plus sévères - Code de la rue - Zones 30 aux abords
- 2007: Interdiction dépassement pour camions s'il pleut - Veste
- 2011: Feux allumés de jour pour les nouveaux véhicules
- 2020:
IV. The four main killers in traffic

- Distraction
- Speeding
- Alcohol
- Seatbelt
Killer 1: Speeding

Highway
(Floating car data)

Night
Day

School area's (radar)

Night
Day

Maandag Dinsdag Woensdag Donderdag Vrijdag Zaterdag Zondag

Bron: Gedragsmeting Snelheid – Vias institute

Killer 1: Speeding
Projects by Vias institute to attack this problem

- ‘I also check speed’

- Blackbox- project
1. Legal verification and calibration of average speed measurement equipment

- **What do we verify?**
  - Distance
  - Time
  - Software

- **What do we calibrate?**
  - Camera (ANPR)
2. Verification of speed measuring equipment

- LABO VERIFICATION (of mobile radars):
  - Speed simulation
  - Control of the opening angle
  - Control of the antenna angle
  - Control of the frequency
Killer 2: Not wearing the seatbelt
Killer 3: Alcohol
Behavioural Measurement: Driving under influence (age)

Evolutie van de ROI-prevalentie bij automobilisten op basis van de leeftijdscategorie
Solution for recidivism: Ignition interlock Device
Testing laboratory Alcohol

Activities:

Legal verification of breath analysers and alcohol interlocks

Testing laboratory Alcohol

Activities: (Cont.)

Engineering assistance for manufacturers of breath alcohol test devices

Training Police Force: driving under the influence of alcohol.

Working group on European standards (Afnor-Cenelec)

OIML R126- Breath analyzers
en trots erop.
Killer 4: Distraction

- Between 5 to 25% of all accidents are caused by ‘distraction’, mainly the smartphone

- 37% read a text message or email while driving in the past year
- 28% of the Belgian car drivers talked on a hand-held phone in the past year
- 41% talked on a hand-held mobile phone while driving
What are the effects of hand-held phoning?

▸ Experiment with ‘eye-track glasses’
  ▸ Less focus on road signs
  ▸ Less focus on other road users
  ▸ Less use of the side mirrors
V. Other Road Safety initiatives of Vias institute

- Driver Improvement courses for convicted offenders / Rehabilitation measures
- Fitness to drive (elderly and medical problems)
- Laboratories
- International projects
Driver Improvement / Rehabilitation measures

- Recidivism Sartre Consortium 2012: 25-40% of the accidents are due to alcohol
- DRUID hospital study: 38.2% in hospital more than 0.5 g/l alcohol in the blood

- High rate of recidivism: small group of offenders responsible for high share of road accidents
- Classic penalties have little effect on this group
- To break this habitual behaviour, some alternative behavioural measures are developed

- 4 killers: Speed, Alcohol and drugs, Seatbelt and Distraction
Driver Improvement / Rehabilitation measures

**Driver Improvement**
- Since 1995, educational measure in group
- Goal: awareness-raising as far as the risks are concerned, social responsibility and behaviour change

- Methodology: CBT and planned behaviour
- Techniques: group dynamics and motivational interviewing

- Different modules: Alcohol, Drugs, Speed, Agression, Young drivers, Moped
FITNESS TO DRIVE: CARA DEPARTMENT

DIRECTIVE 2006/126/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 December 2006 on driving licences

Article 7: ... and who meet medical standards, in accordance with ...
Annex III: Minimum standards of physical and mental fitness ...

Fitness To Drive evaluation: medical
(neuro)psychological
driving practical (on road)

Multi-disciplinary decision: solution seeking
Fitness to drive: CARA department
Laboratories

- We do the legal verification, inspection and testing of equipment and devices to help road users safely on their way
- Our well-equipped laboratories have 2 main activities:
  - testing (ISO 17025)
  - inspection and certification (ISO 17020)
Automobile Inspection Center Laboratory

The list of devices that we check:

- 4 gas exhaust analysers
- Leakdetectors (LPG)
- Smokemeters
- Headlamps aiming systems
- Support floors for headlamps aiming systems
- Braketesters, mobile braketesters (trucks)
- Suspension testers
- Control devices for the coupling calibers (semitrailers)
- Candelameters (taillight intensity)
- 3D control devices of the vehicle’s frames
Helmets Laboratory

- State of the art laboratory
- Established in the years ‘70
- Accredited ISO17025/ISO17020
- Testing of motorcycle helmets and their visors (R.22)
- Testing of bicycle helmets (EN1078) and helmets for little children (EN1080)
- Testing of bicycle helmets for riders of speed pedelecs (NTA8776)
International Project: ESRA
(E-Survey on Road users Attitudes)

ESRA is a fast-evolving network of 26 research organisations and road safety institutes; the project had collected data in 38 countries across the world.
International Project : ESRA  
(E-Survey on Road users Attitudes)

- International survey research led by Vias institute
  - Online
  - Identical methodology in all the countries
  - Comparable data about behaviour, attitudes, number of police checks, etc
  - Country fact sheets

- ESRA 1 (2015-2017) in 38 countries
- ESRA2 (2018-2020) in +50 countries
- WWW.ESRANET.EU
International project: Safer Africa- Algeria and much more...

- Vias institute is a privileged partner for numerous projects in Africa. We not only have a vast expertise in road safety but are also capable to share that knowledge. Our flexibility to adapt ourselves to the local context is also a big advantage.
VI. Q&A
Thank you!
www.vias.be