# Legislation: The end or means to road traffic safety?

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### **Content**

- What does road safety law refer to?
- How has legislation been effective as part of a complete road traffic safety programme?
- What problems with legislation have emerged?
- What makes RS legislation good?
- What you can do in public health?
- References and resources



### What does road safety "law" refer to?

- No simple answer
  - Laws + regulations + ordinances etc.
  - National, State, Local
  - "Federal" systems context
    - Adoption of federal (national) laws by states and localities
    - Flexibility of states and localities in a Federal system
  - Case laws When does judicial interpretation set precedent?
- By "type"
  - Civil
  - Administrative
  - Criminal





### What does road safety "law" refer to?

#### By topic

- Road traffic laws:
  - Licensing requirements for driver licenses, including insurance requirements, etc.
  - behaviour-regulating drink-driving, seat-belt wearing, helmet-wearing, speed reduction, child restraints, etc.
- Emergency/post crash:
  - Technical e.g. ambulance standards
  - Professional licensing/certification e.g., for first responders
  - Facility e.g., emergency facility standards, inter/intra facility transfers requirements



### What does road safety "law" refer to?

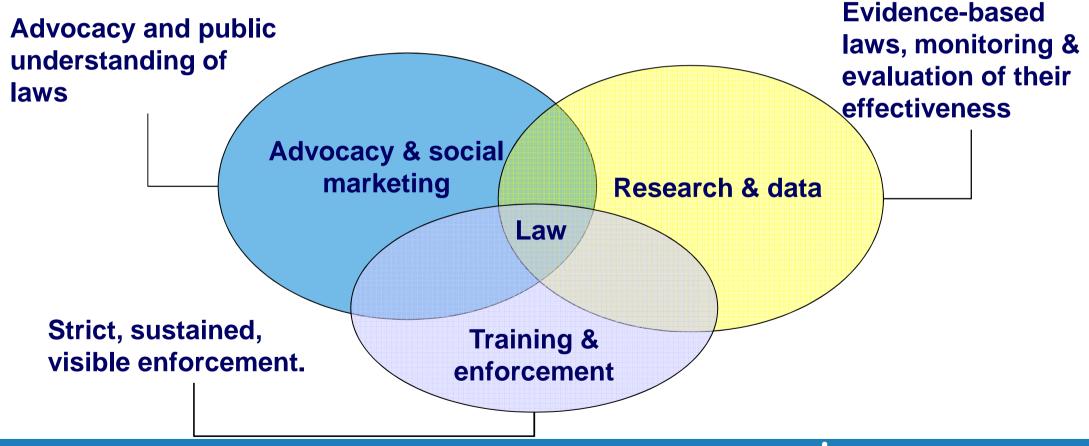
- Motorized vehicle safety-related laws
  - Technical vehicle standards
    - Manufacturing (and imports)
  - Other technical standards e.g., motorcycle helmet standards
- Others
  - Mass transport
  - Road design, construction and maintenance



### How has legislation been effective...

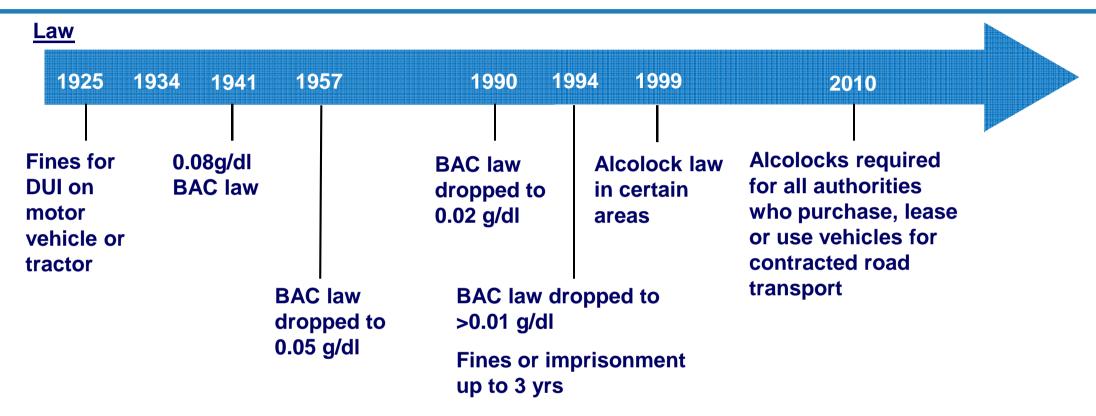
• . . . as part of a complete road traffic safety programme?

Evidence-based interventions + Public education + Sustained and visible enforcement





## How has legislation been effective...? Drink-driving in Sweden



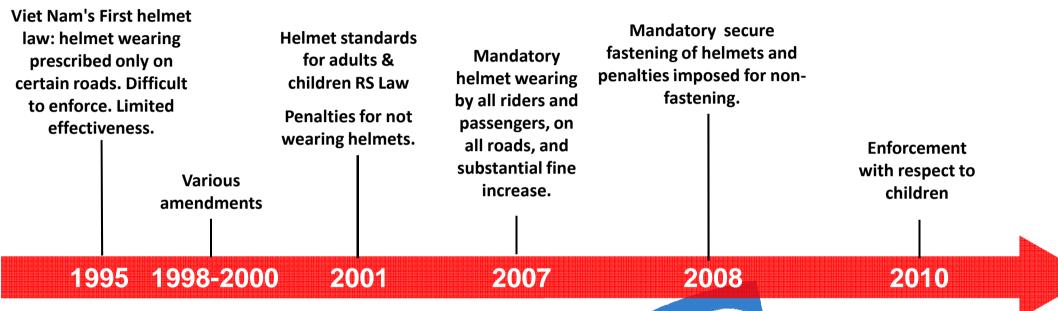
<u>RBT Intervention</u>: Over 1 million RBTs (17% of population) annually – 2<sup>nd</sup> highest in Europe (Finland = 34%). Testing anywhere, regardless of suspicion. Compulsory RBT for all involved in injury crash. Voluntary rehabilitation for those with alcohol problems. Strict enforcement.

Result: Proportion of drunken drivers involved in crashes decreased from 14% to 9% (period unspecified)



## How has legislation been effective...? Motorcycle helmet wearing in Vietnam





Between Sept-07 and Mar-08

16% reduced risk of head injuries

18% reduced risk of death

**Effectiveness** 



## What problems with legislation have emerged?

- Laws not based on evidence, not comprehensive.
- ✓ There are solutions the problem.



Set limits taking into account nature and purpose of road and vulnerable road users. 50 km/h or less in urban areas.

Local authority to reduce limits where vulnerable road users are particularly at risk.



Mandatory helmet use for all motorized 2-3 wheelers.

Cover all riders & passengers, engine & road types.

Helmets meet standards.



BAC at or below 0.05 g/dl.

BAC at or below 0.02 g/dl novice/young drivers



Mandatory child restraint use, by type and age of child



Manufacturers and assemblers required to fit seat-belts in all seating positions.

Mandatory seat-belts for all occupants.



## What problems with legislation have emerged?

#### Coverage

- Who (e.g., front seat passengers only)
- What (e.g., not all vehicle types)
- Where (Federal vs. State vs. local; not all road types)

#### Enforcement challenges

- How? E.g., use of speed cameras, evidentiary issues related to drink-driving
- What? Lack of technical standards (e.g., helmets)
- Capacity and training



## What makes RS legislation good

- Evidence-based
  - Address the type of interventions that work
- Comprehensive (or complete)
  - Intervention: define the intervention what to do/not do
  - Coverage: who, what, where, when?
  - Fines and penalties: reasonable and strike a balance between deterrence and punishment
  - Enforcement: How and by whom?
  - Keep exceptions to a minimum
- Enforcement
  - Deterrence and punitive



### What you can do in public health?

- More on effective interventions in low- and middle-income countries
- Monitor road safety trends vs. laws and effectiveness in your country
- Inform and educate non-research community
- Keep us informed of any changes in laws for monitoring



### Wrap up and questions

- Legislation: end or means to road traffic safety?
- Only part of a complete package!



#### References and resources

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