Unprotected road users left behind in efforts to reduce road deaths

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WETENSCHAPPELIJK ONDERZOEK VERKEERSVEILIGHEID

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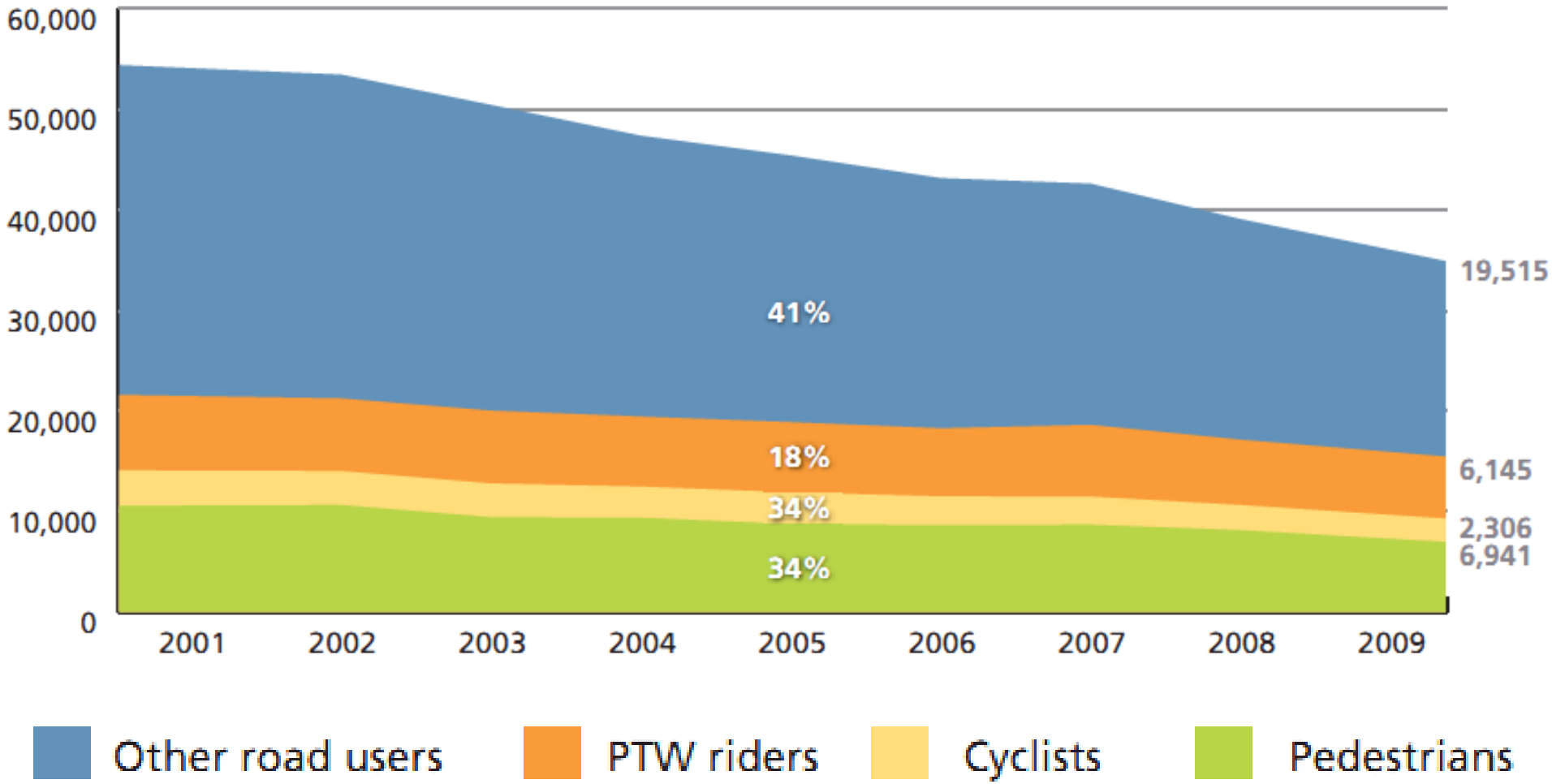
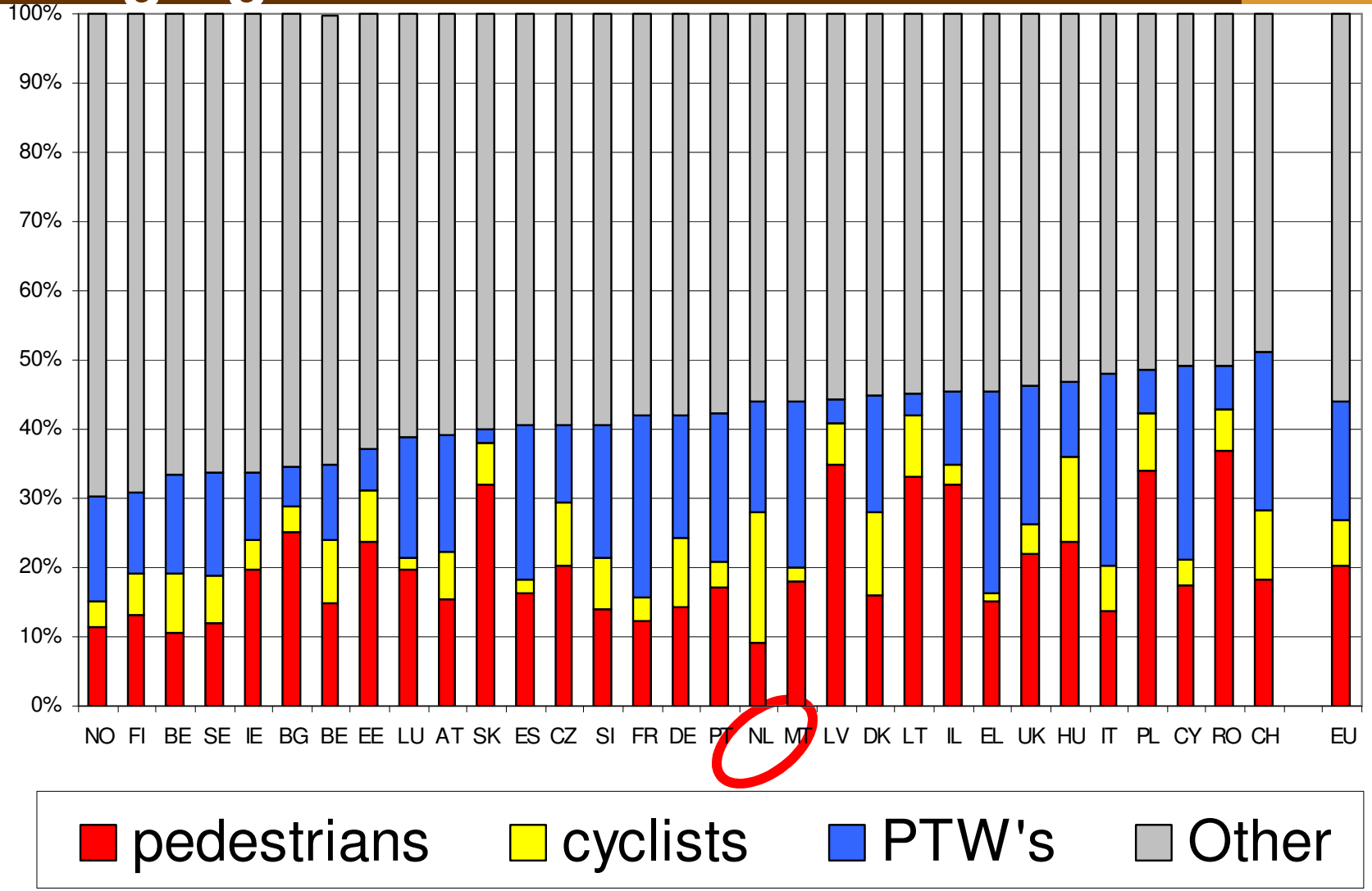
European Transport Safety Council

Reduction in road deaths since 2001



44% of all deaths are unprotected road users, ranging from 30% to 50% in EU27-countries



56%

20%

6%

17%

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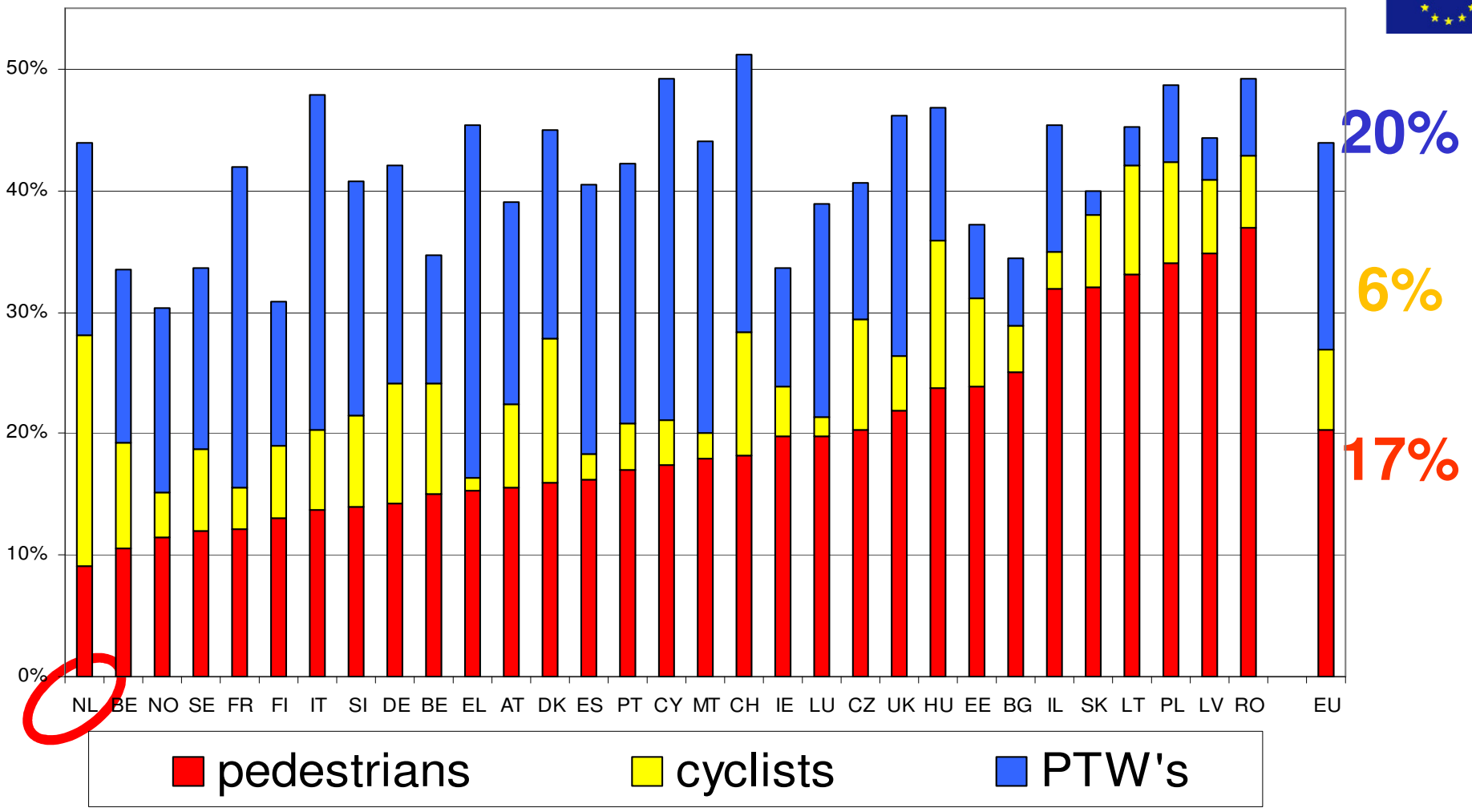
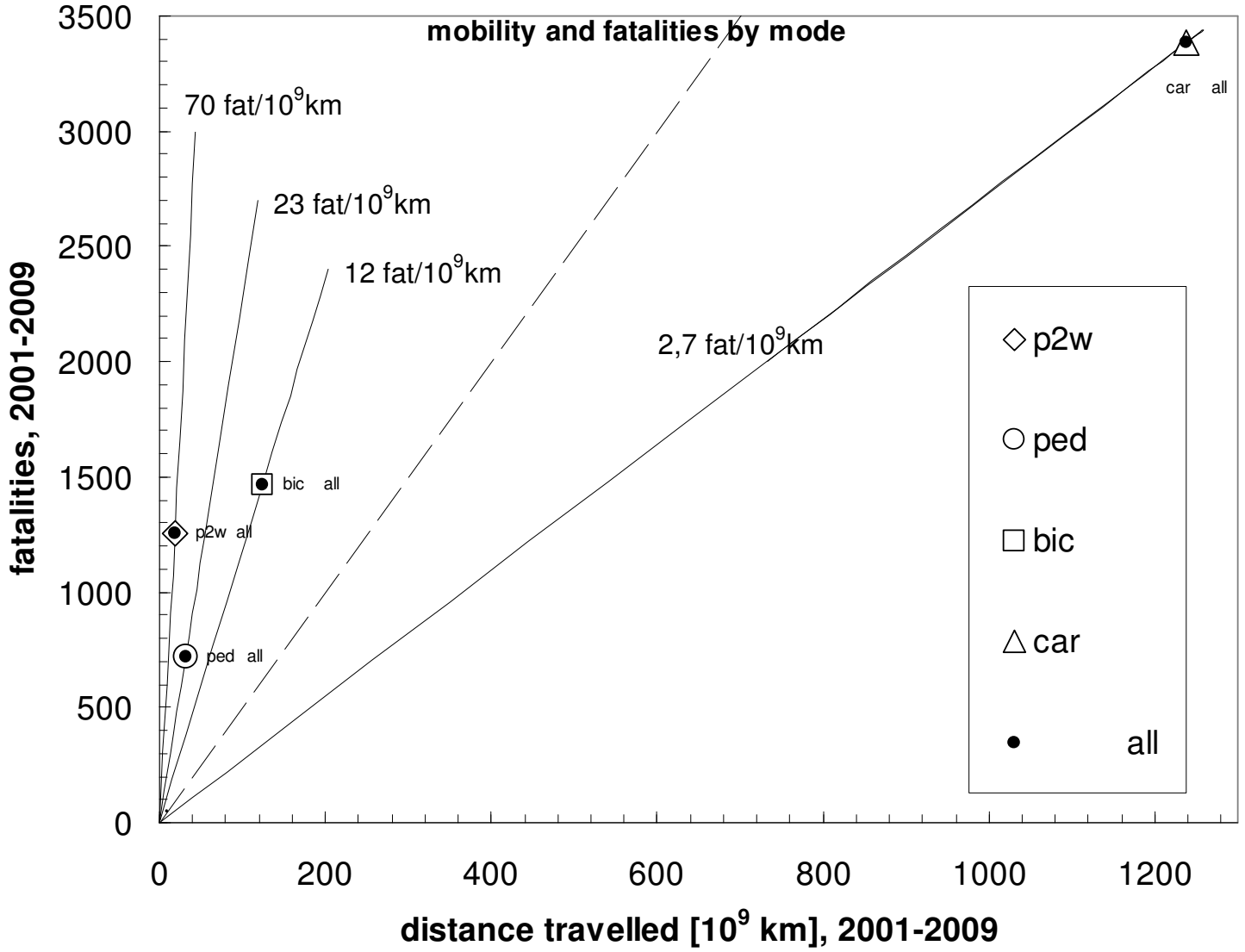
Pedestrians, bicycles or p2w?
Strong differences between member states



Why these differences between countries?

- Different travel habits between countries, of
    1. Walking
    2. Cycling
    3. Riding a M2W
- Different over all safety levels between countries
- Travel and risk(behaviour) are age-dependent

Travel and fatalities in The Netherlands



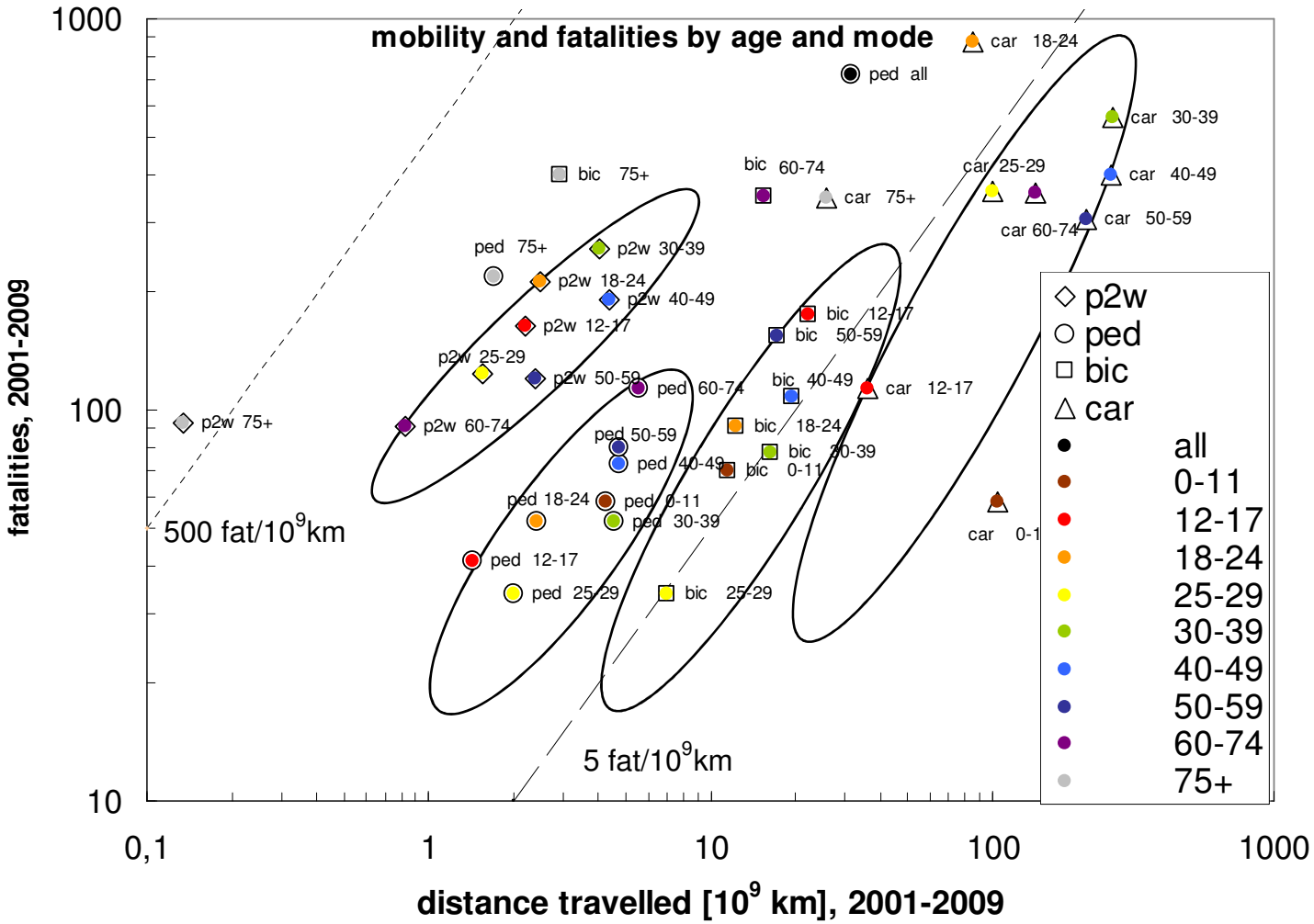
Risk: fatalities/km

Mean risk= 4.8 fat/10^9km

M2W-risk = 30 times Car-risk

Ped-risk = twice the Bicycle-risk

Travel and fatalities in The Netherlands by age.

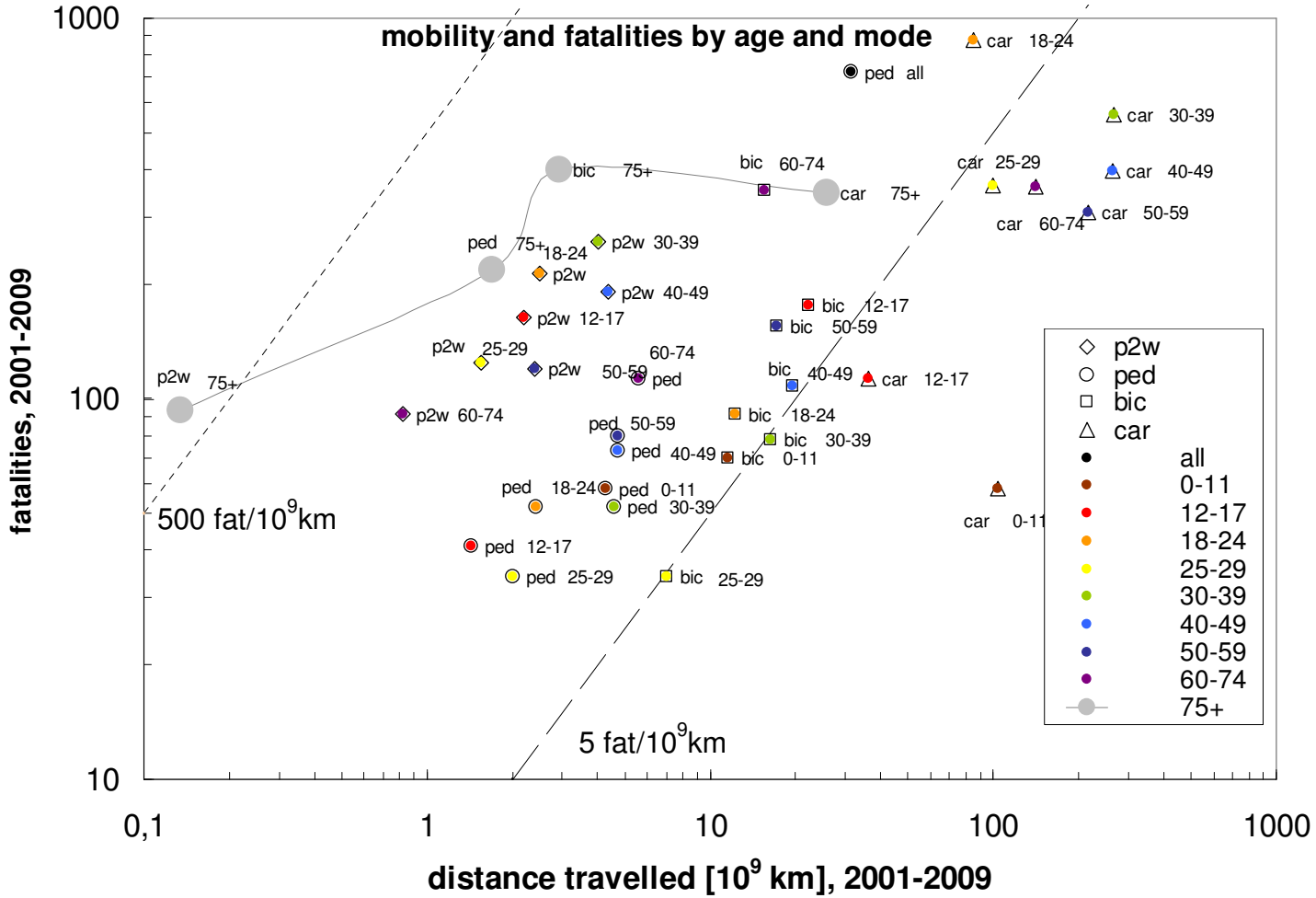


Mobility and risk depend on age.

For every age group:

Risk for p2w > risk for ped. > risk for bic. > risk for car occ.

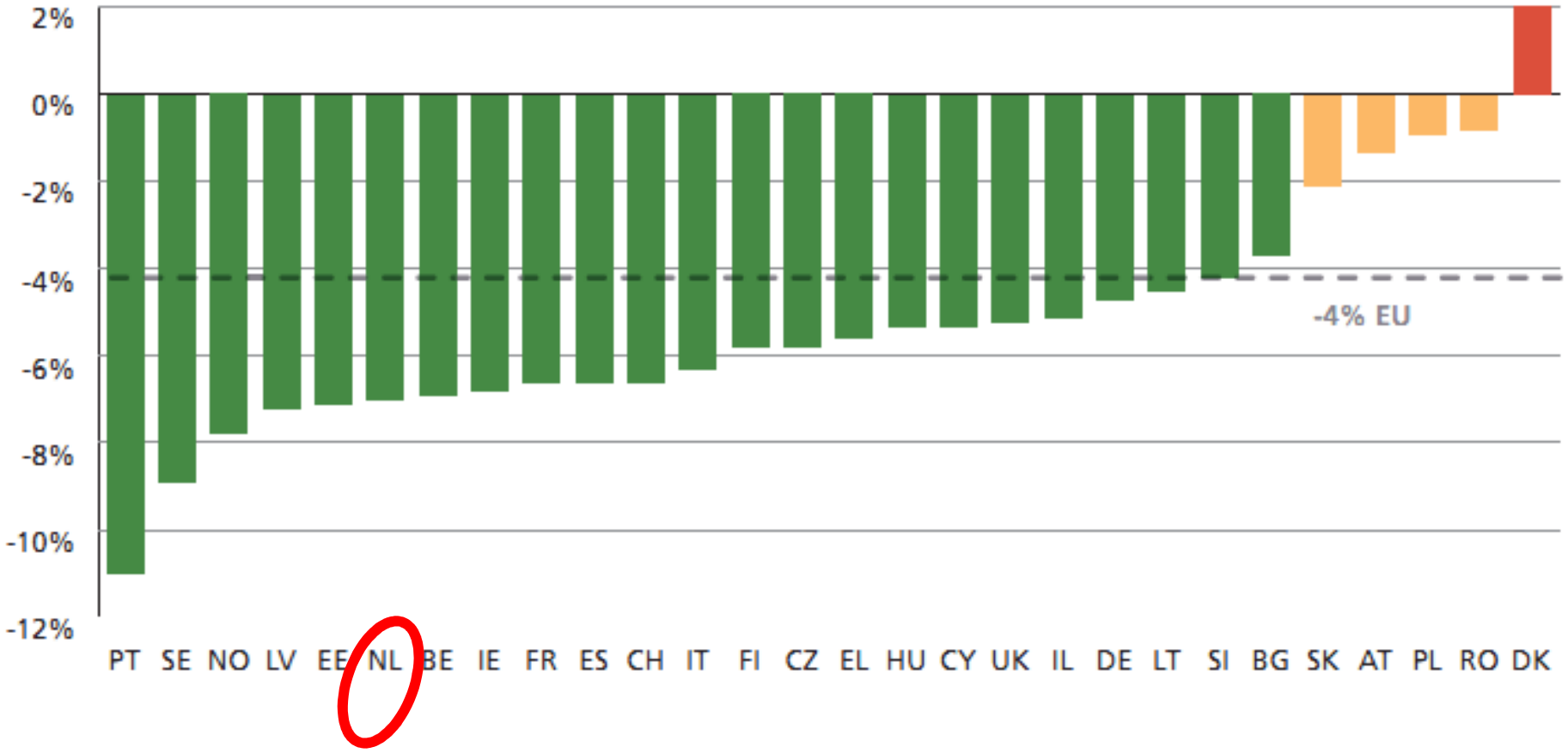
Travel and fatalities in The Netherlands, example: 75+



Risk difference for 75+ users of car and p2w:

almost 100 times more risk for p2w

Reduction in pedestrian deaths



Annual average % change in pedestrian deaths (2001-2009)

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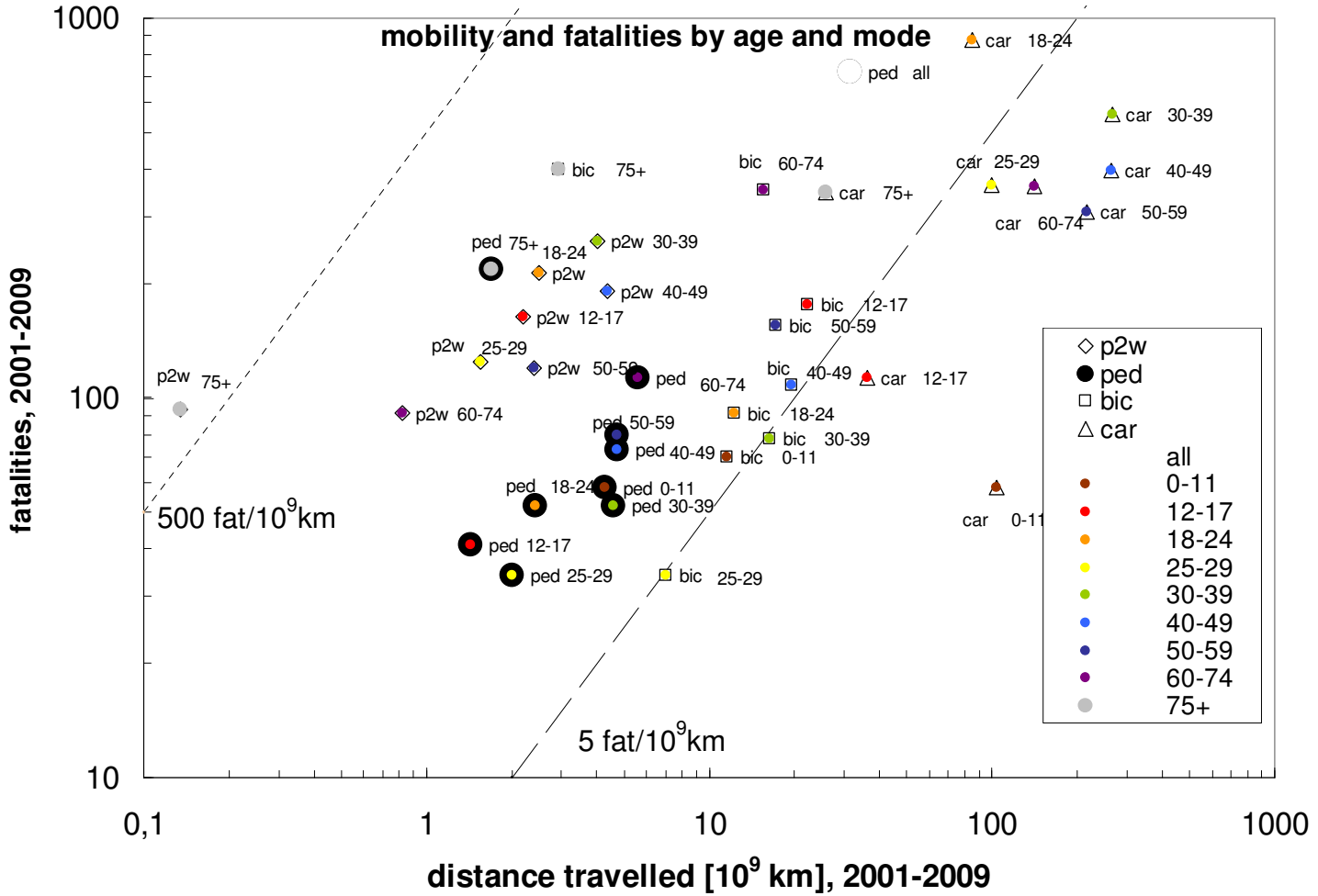
Travel and fatalities in The Netherlands, pedestrians



Highest risk for 75+ years then for 12-17, 18-24, 25-29

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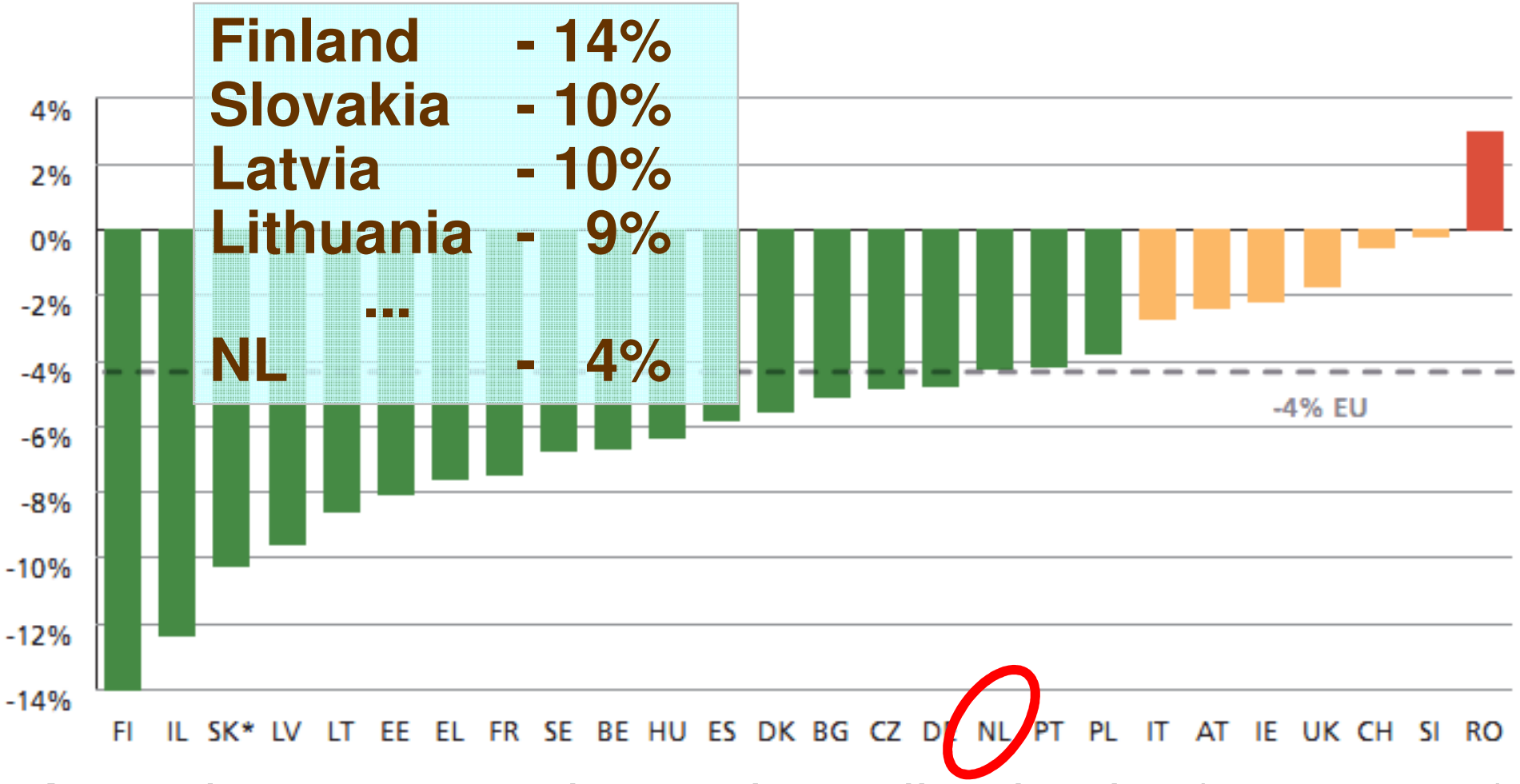
Reduction in cyclist deaths



Annual average % change in cyclist deaths (2001-2009)

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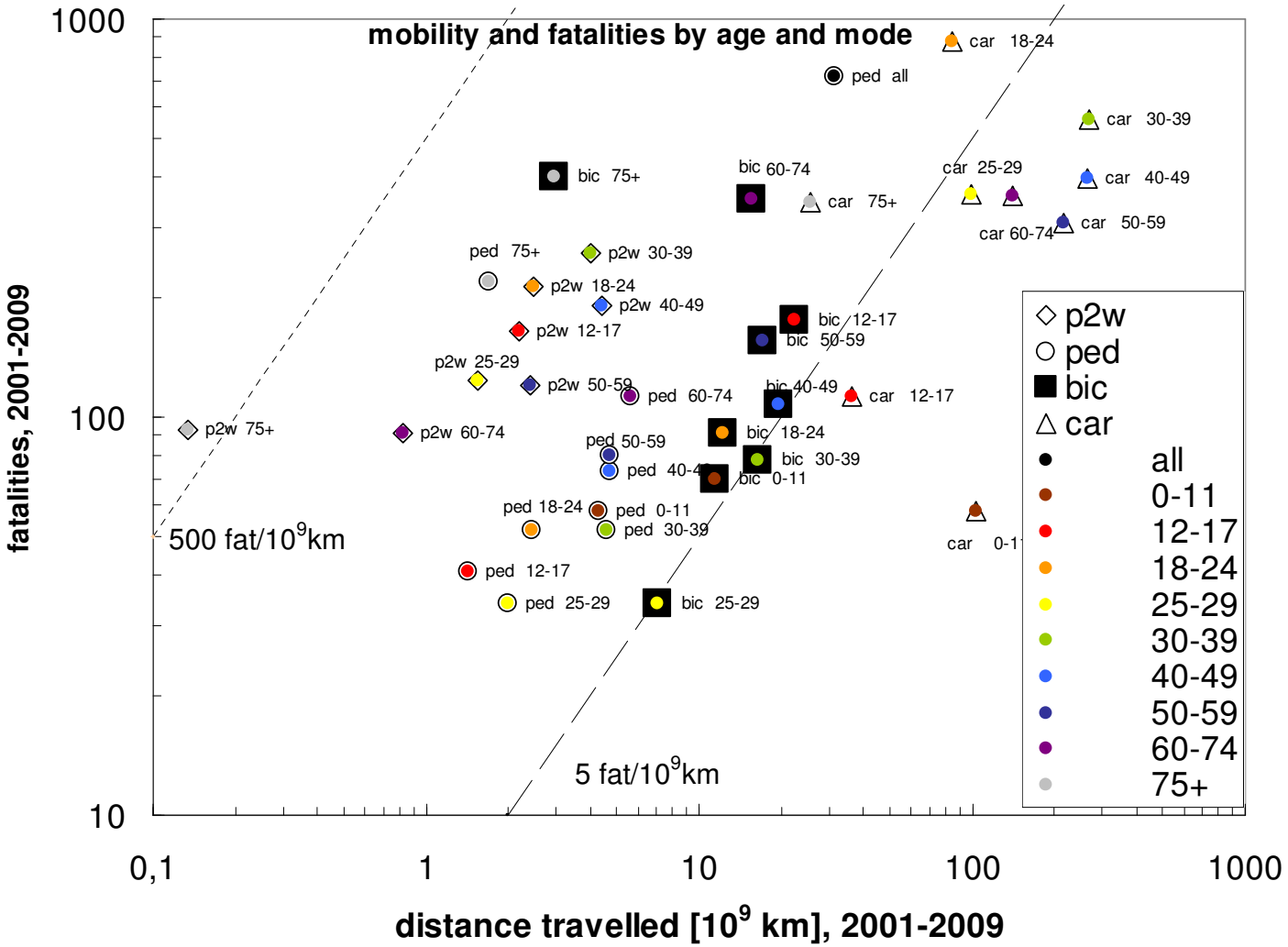
Travel and fatalities in The Netherlands by age, for cyclists



Cyclists Between 0-60 have the same risk

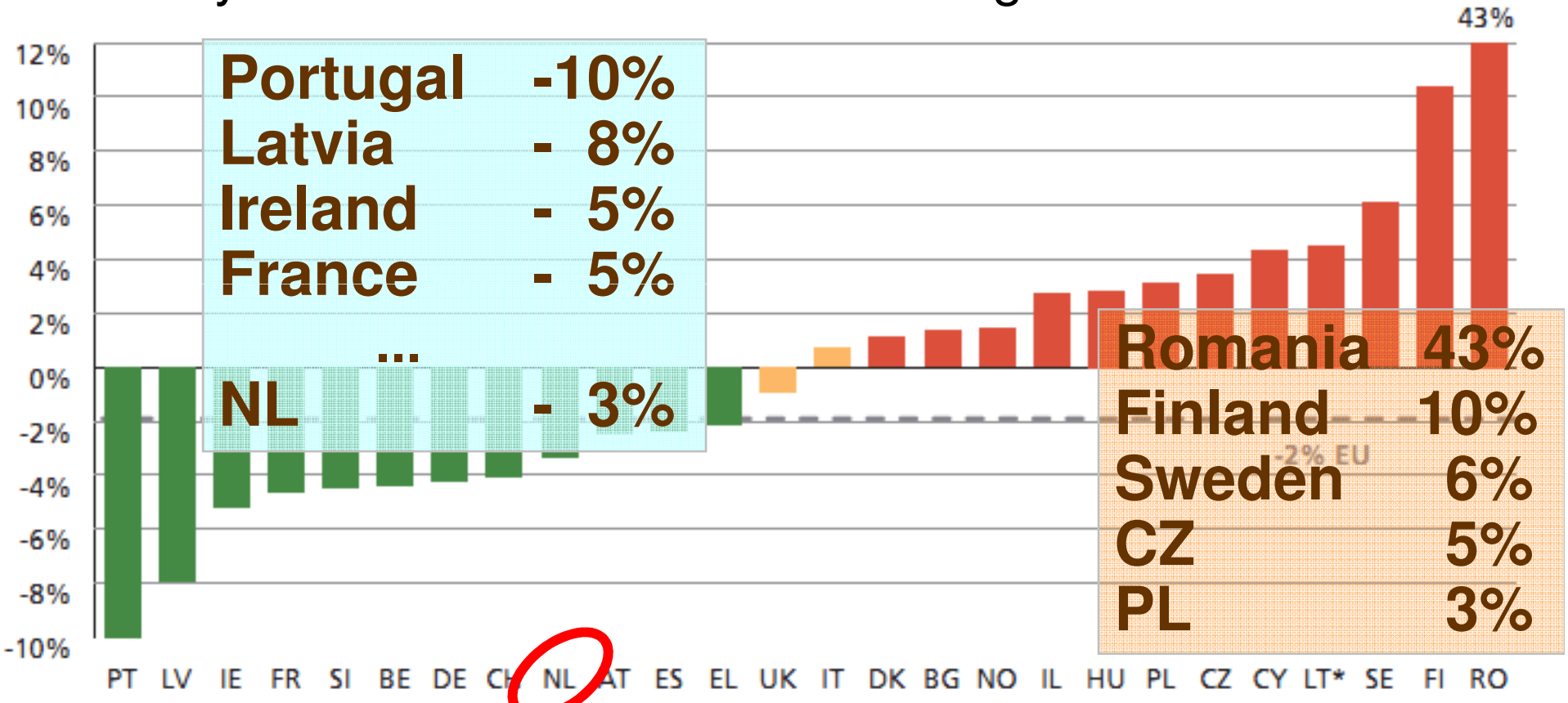
60+ riders have much higher risk.

Ageing population + popularity of (electr) cycling increases fatalities

Change in road deaths among PTWs

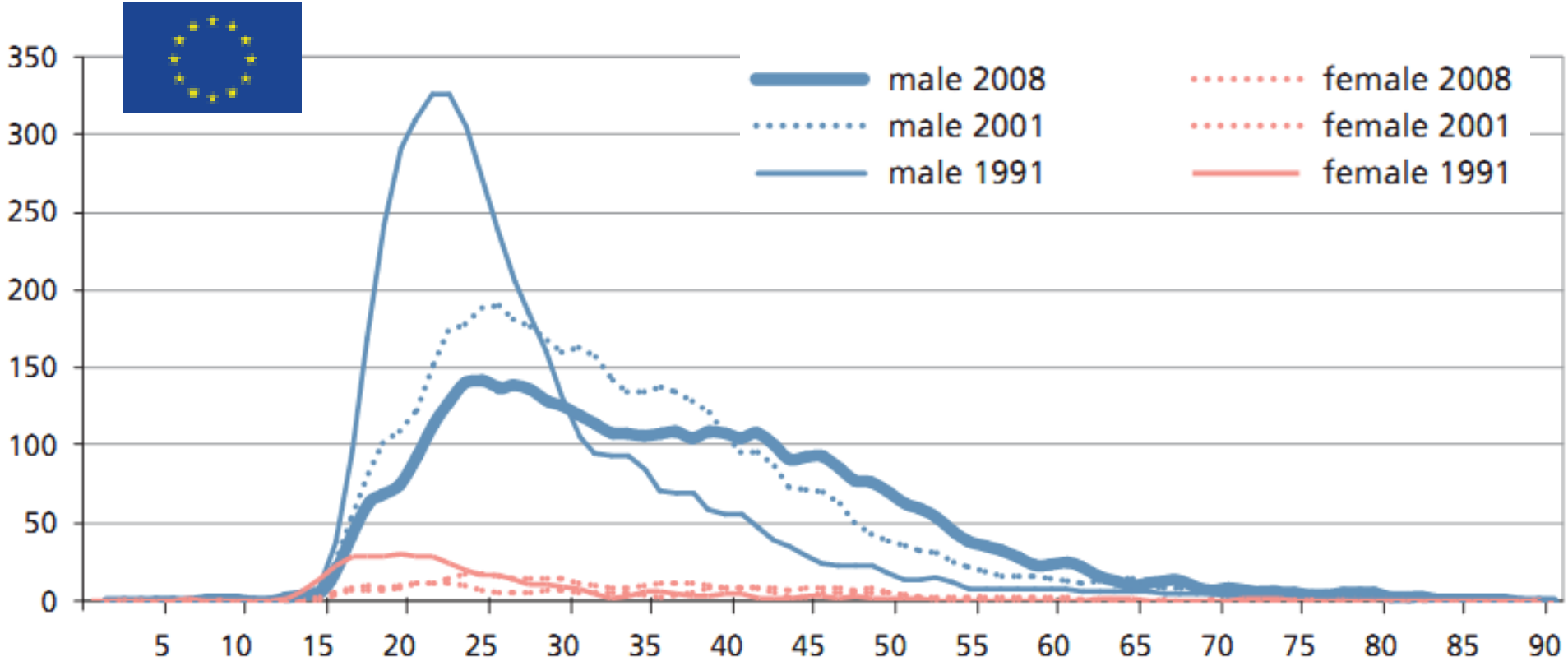
Insufficient progress: **6,000** riders killed in the EU

- only **18%** reduction in deaths among PTWs since 2001



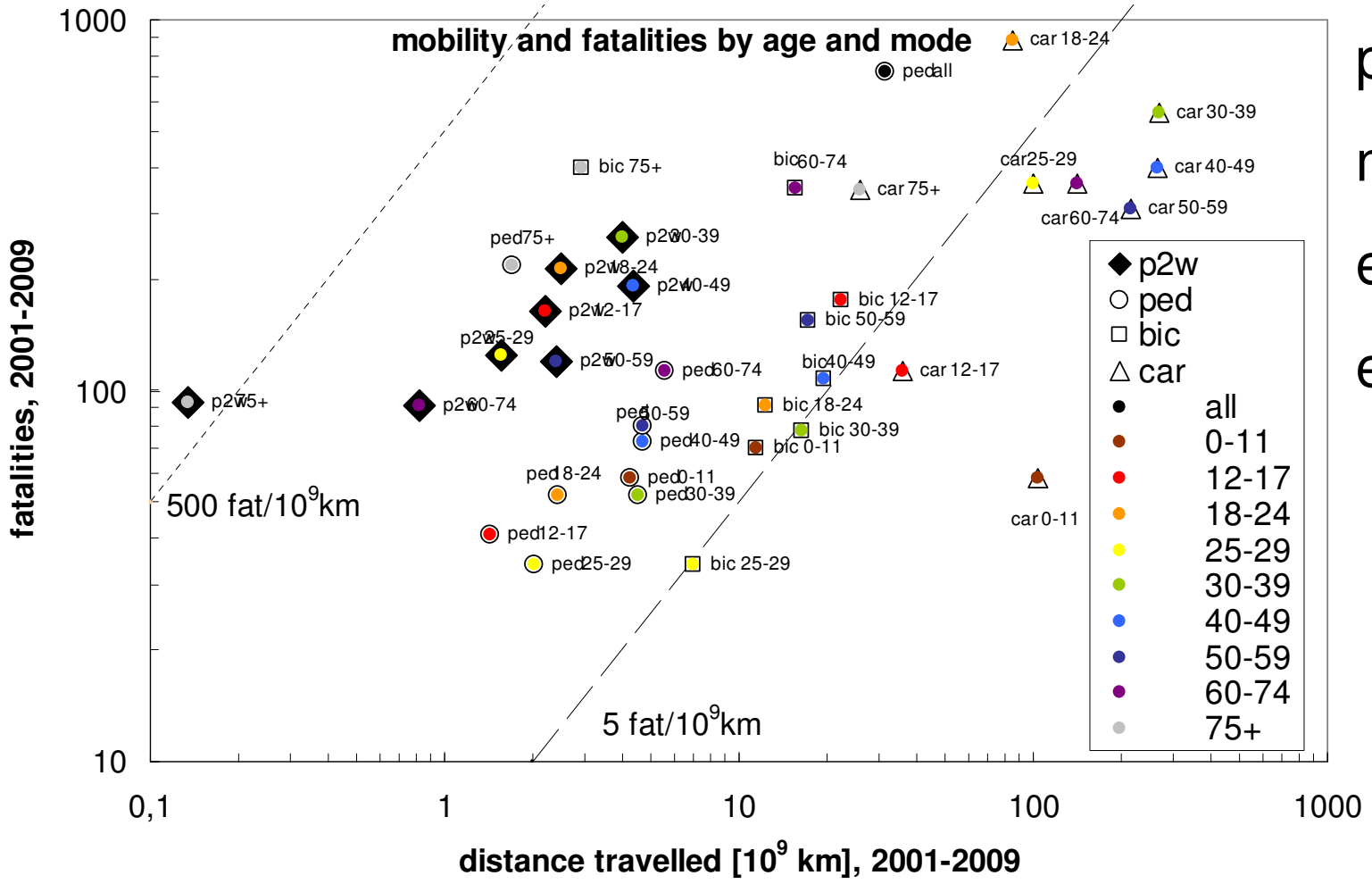
Annual average % change in PTW deaths 2001-2009

More mid-life riders



Male and female motorcycle deaths by age in 2008 (with 2001 and 1991 for comparison)
Source: CARE

Fatalities and mobility of p2w's



p2w much more risk, especially elderly (60+)

Good practices from the NL general approach for all road users

Sustainably safe road traffic system:

- Separate slow and fast traffic
- Separate heavy and light traffic
- Separate traffic with different directions

Specific safety problems

For pedestrians: crossing the street

For cyclists: crossing intersections

Since 1998: 40,000 km of 50km/h roads → 30 km/h

33,000 km of 80km/h roads → 60 km/h

Separate bicyle lane

50 km/h

50 km/h

Separate lanes

80 km/h

80 km/h

30 km/h


Hylpen
Hindeloopen
gem. Nijefurd
friese steden
30
Hylpen
Hindeloopen
gem. Nijefurd
30


Bredeweg

Specific measures

- Priority for cyclists and moped riders coming from the right.

- Mopeds on the carriageway (and not on the bicycle lane)
- Enforcement on illegal uptuning of moped engines (to increase the maximum speed)
- Moped rider certificate

Mopeds on carriage way

Enforcement uptuning mopeds

Remaining challenges

- Not all 30 km/h roads are properly constructed (speed bumps, a construction that enables safe crossing).
- Many remaining 50 km/h roads cannot easily be rebuilt.
- Many single vehicle accidents.
  - cyclists: in NL half of all seriously injured!
  - p2w: 30% single vehicle fatalities.
- p2w: a real challenge:
  - unprotected
  - high speeds
  - unstable equilibrium vehicle