



Tour d'Europe

Facts and fables of cycling safety in Europe



TOUR D'EUROPE FACTS AND FABLES ABOUT CYCLING SAFETY

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Prevent crashes, reduce injuries, save lives

ACKNOWLEDGING THE CASUALTIES

- Yearly 2000 cyclists are killed in the EU
- Increase 2004-2013 from 6 to 8% of all EU road deaths
- Cyclist fatality rate (per million population):
 - EU: ~4
 - DK > AT > NL: 6 .. 6.5
- NL has highest proportion of cycling deaths (~25%)
- Ratio deaths to hospitalized injuries:
 - DK 1:521 ; AT 1:951



**KEEP
CALM**

it's

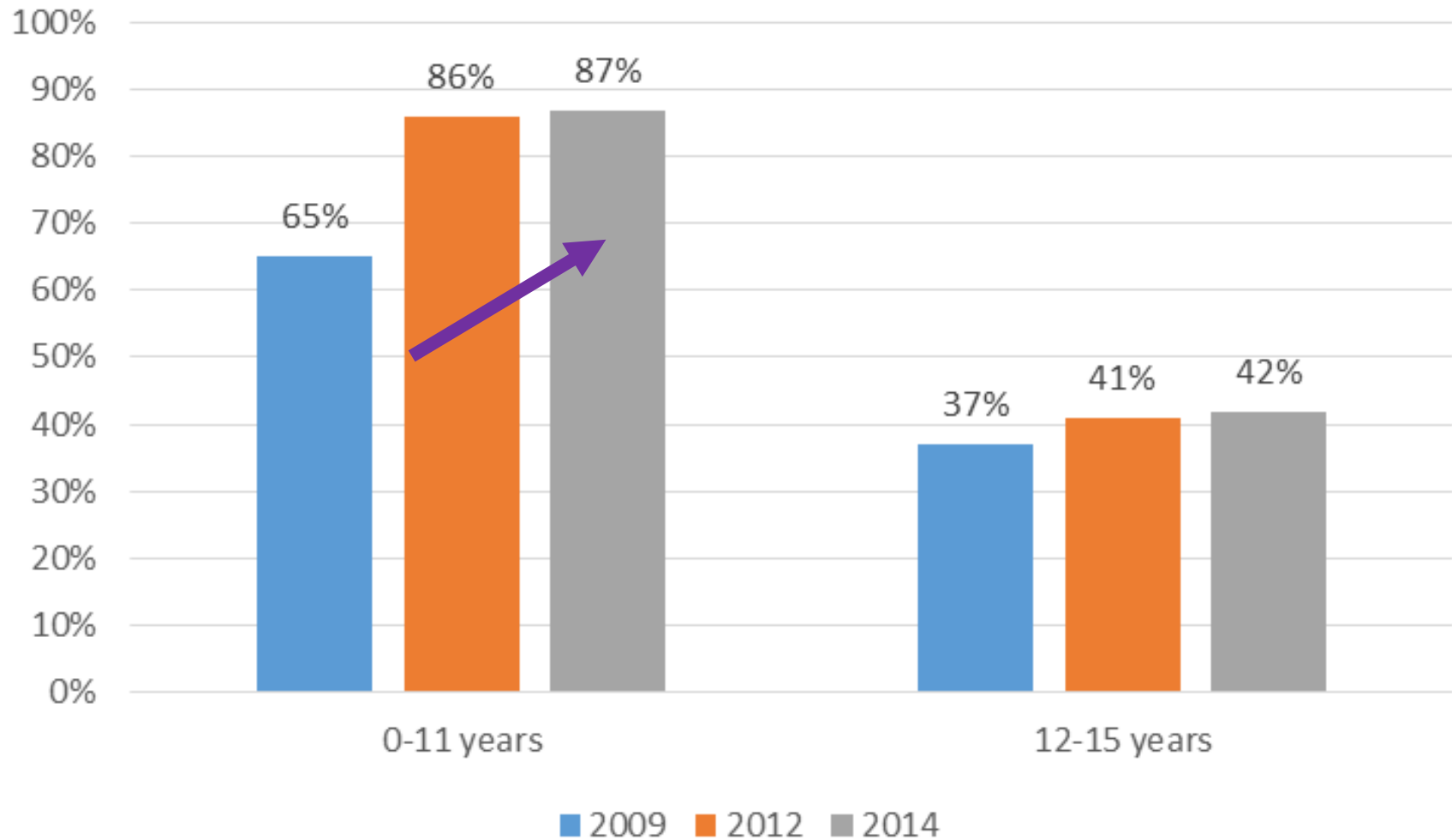
**ONLY A
PUB QUIZ**

Q1: Austria introduced a child cycle helmet (<12 years) obligation in 2011 :

→ what was the impact on head injuries?

- A) No impact
- B) The proportion of head injuries increased
- C) The proportion of head injuries decreased

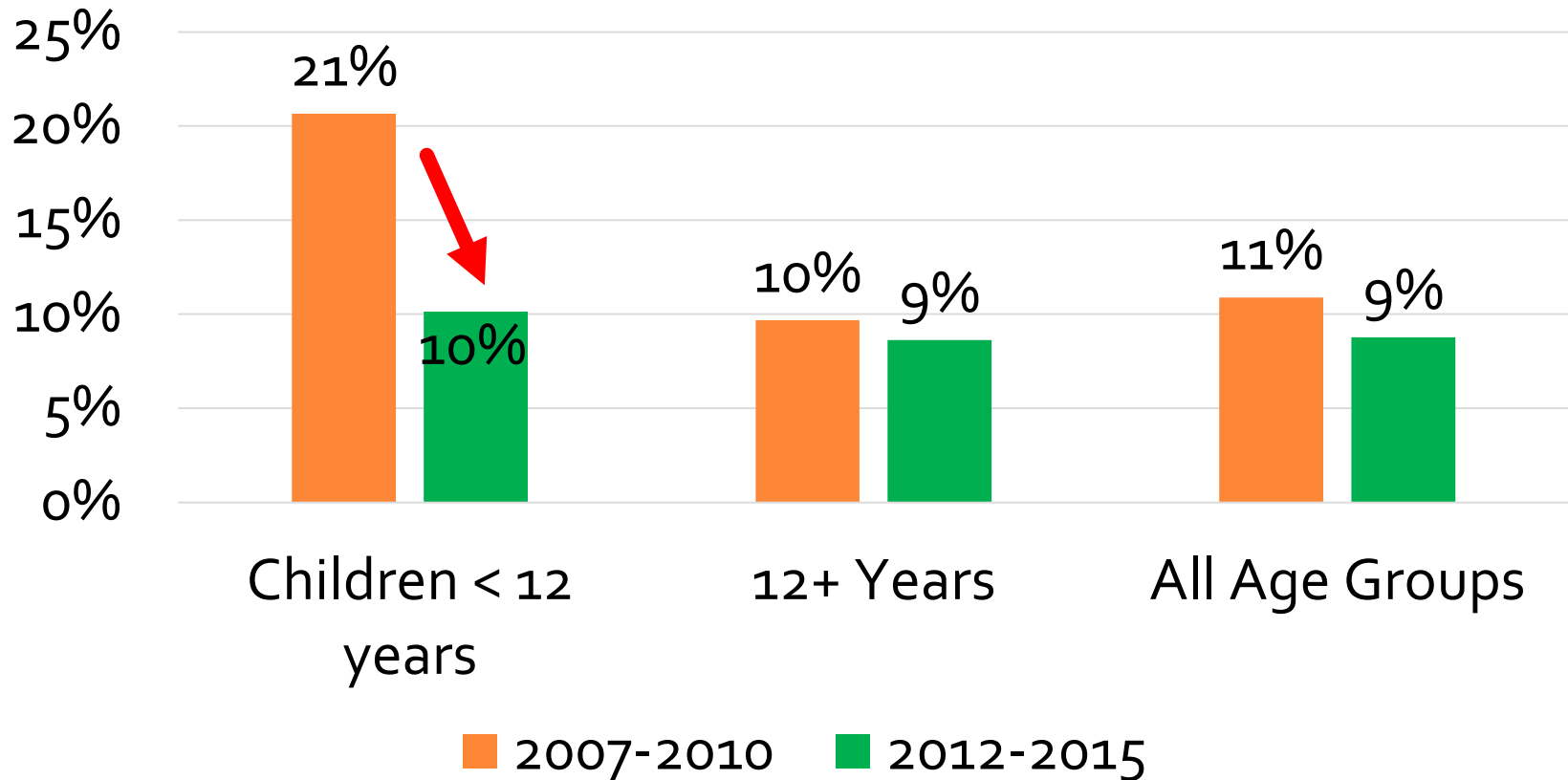
HELMET WEARING - INCREASE IN TARGET GROUP FROM 65% TO 87%



Proportion of bicyclists (up to 15 years of age) wearing a helmet in Austria.

Source: KFV, 2009 (n=2.551), 2012 (n=3.127), 2014 (n=5.449).

PROPORTION OF HEAD INJURIES - REDUCTION IN TARGET GROUP FROM 21% TO 10%



Source: KFV, IDB Austria 2007_2015; Austrian residents treated in Austrian hospitals;

Proportion of head injuries in bicycle crashes in Austria by age group.

Percentage of head injuries defined as number of head injuries related to number of crashes

($n_{2007_2010_<12\ Years}=3.900$, $n_{2012_2015_<12\ Years}=1.700$, $n_{2007_2010_12+\ Years}=14.700$, $n_{2012_2015_12+\ Years}=12.900$, $n_{2007_20110_All_age_groups}=18.600$, $n_{2012_20115_All_age_groups}=14.600$; estimates; figures rounded)

Q2: The support among parents for children cycle helmet obligation in Austria is low.

fact

fable

91% of parents surveyed, believed that protective clothing/equipment – such as a bike helmet – is "very important" (77%) or "rather important" (14%).

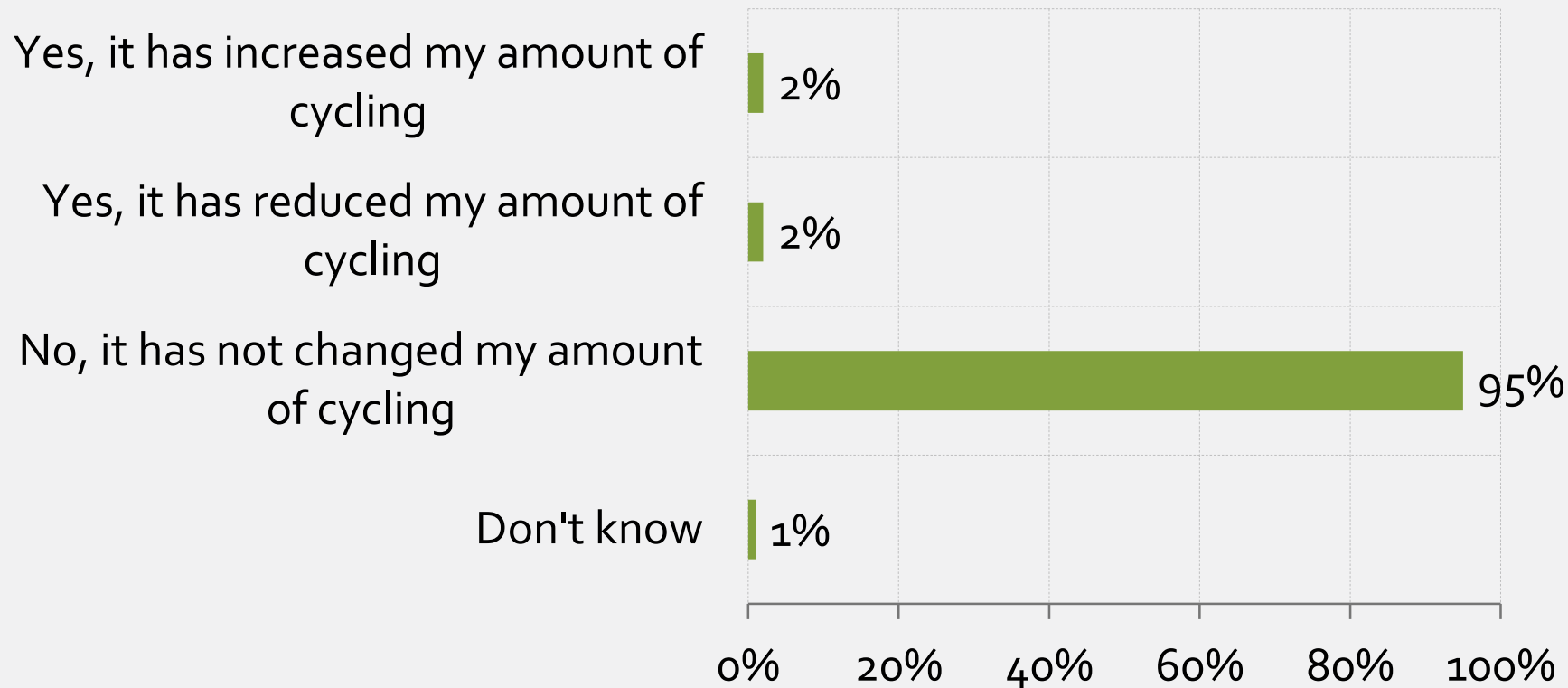
Q3: Campaigns promoting bicycle helmets have reduced the amount of cycling in Denmark

fact

fable

**FACT: 95 % HAVE UNCHANGED AMOUNT OF CYCLING,
2 % INCREASE AND 2 % REDUCE CYCLING**

Has information and/or campaigns on the use of bicycle helmets from the Danish Road Safety Council caused you to cycle more or less? (N=311)



Note: Based on respondents that have noticed information and/or campaigns. Source: (Epinion, 2016 May)

Q4: Which one is a speed pedelec in NL ?



- A) Model left
- B) Model right
- C) No idea

NO OVERT VISUAL DIFFERENCES

○ Pedelec

- 250 kw/h motor
- Max 25 km/u
- Pedal support

- Legal status: Bicycle

○ Speed Pedelec

- 350 kw/u motor
- Max 45 km/u
- Pedal support

Legal status (now NL):
Light moped: blue
insurance plate

Q5: In NL, elderly on pedelecs are at least 7 km/h faster than middle-aged riders on conventional bicycles.

fact

fable (there is almost no speed difference)

*Source: Vlakveld, W. P., et al (2015). Speed choice and mental workload of elderly cyclists on e-bikes in simple and complex traffic situations: A field experiment. Accident Analysis & Prevention, 74(0), 97-106.
doi:<http://dx.doi.org/10.1016/j.aap.2014.10.018>*

Q6: What is the injury risk for Pedelec riders aged 50-75 in NL?

- A) The same as for other age groups
- B) 20% higher than for other age groups
- C) Twice the risk of other age groups

Source: Schepers, J. P. et al. (2014). The safety of electrically assisted bicycles compared to classic bicycles. Accident Analysis & Prevention, 73(0), 174-180.

Q7: In what percentage of bicycle crashes may phone use have played a role (in NL)?



- A) 4 – 5 %
- B) 10 – 11 %
- C) 12 – 15%

Risk of phone use by cyclists

Use

Risk in traffic



Phonecall



Texting with
push buttons



Texting with
touchscreen



Listening to
music



Q8: In accidents between turning trucks, bicyclists are hit by the REAR wheel of the truck

fact

fable

Most often the cyclist is hit by the right FRONT wheel

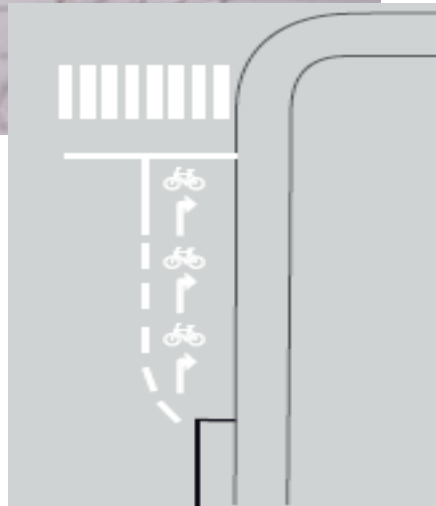
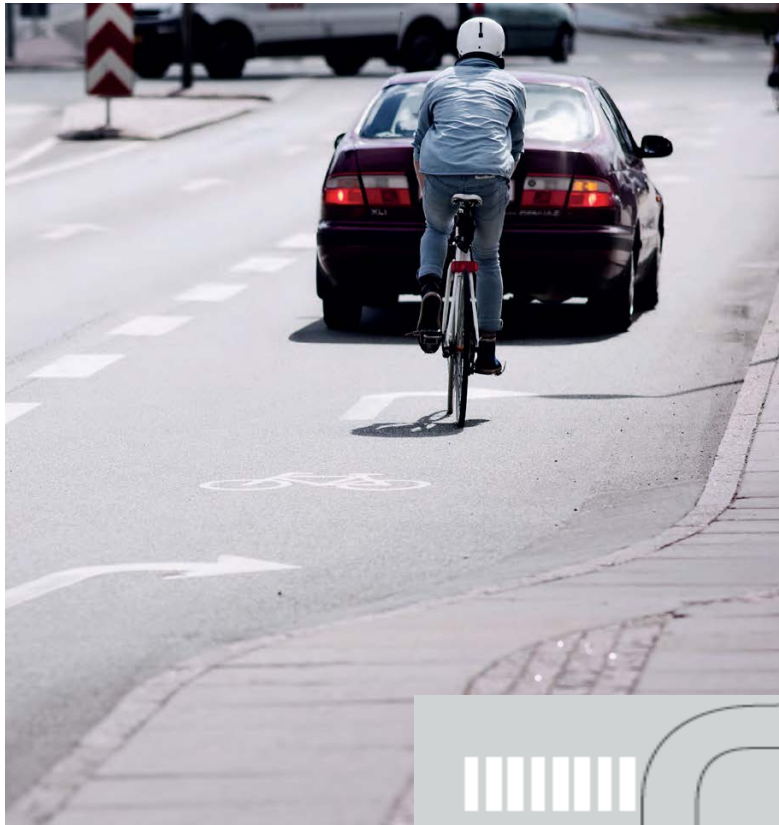


Q9: Ending a bicycle track 15 – 25 meter before the intersection, letting cyclists and motor vehicles mingle, REDUCES crashes in Denmark.

fact

fable

A 15% REDUCTION IN INJURY CRASHES



Afkortet cykelsti
Byzone & Landzone
Effekt (%)

Cyklister og knallerterulykker

Alle ulykker	-15
Pers. ulykker	-15
Mat. ulykker	-15
Personskader	-15
Dræbte	-15
Alvorlig	-15
Let	-15

Effekt (%) ved at afkorte cykelstien i tilfartsspor til signalregulerede kryds. Effekten gælder alene for ulykker med cyklister og knallerterkørere fra tilfarter, hvori cykelstien afkortes.

Source: Handbook, Road Safety, Effects of Road Engineering Instruments 2. edition. Danish Road Directorate 2014.

Q10: There is no effect of separate bicycle tracks on rural roads in Denmark

fact

fable

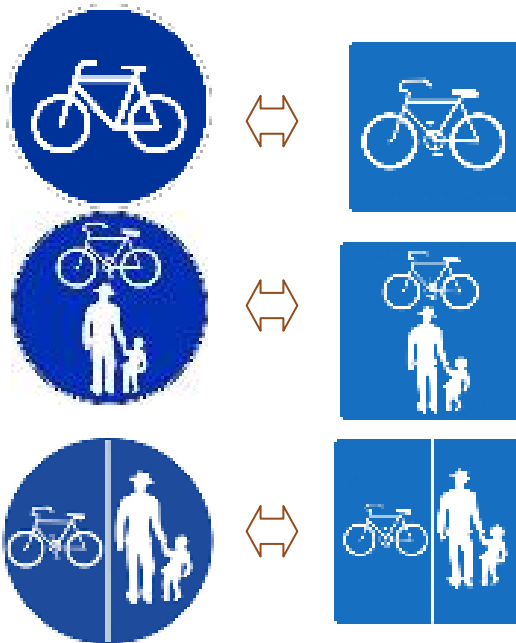
FACT: 50% REDUCTION FOR BICYCLE ACCIDENTS WITH INJURIES



Cykelsti langs vej Landzone Effekt (%)	Ulykker med cykler og lille knallert (uden fodgængere involveret)	Ulykker med fodgængere
Alle ulykker	-56	-35
Pers. ulykker	-62	-35
Mat. ulykker	-40	-35
Personskader	-62	-35
Dræbte	-80	-35
Alvorlig	-61	-35
Let	-60	-35

Effekt (%) ved anlæg af cykelsti langs veje i åbent land.

Q11: What is the difference in the meaning of these signs?



- A) No difference
- B) Use obligation / no use obligation
- C) Inside / outside urban areas

CYCLE PATH WITH USE OBLIGATION

- High speeds of motorised traffic ($v_{85} > 80 \text{ km/h}$) and separated cycling infrastructure available



CYCLE PATHS WITHOUT USE OBLIGATION



Q12: These were **photoshopped**



fact

fable (at least not by us!)

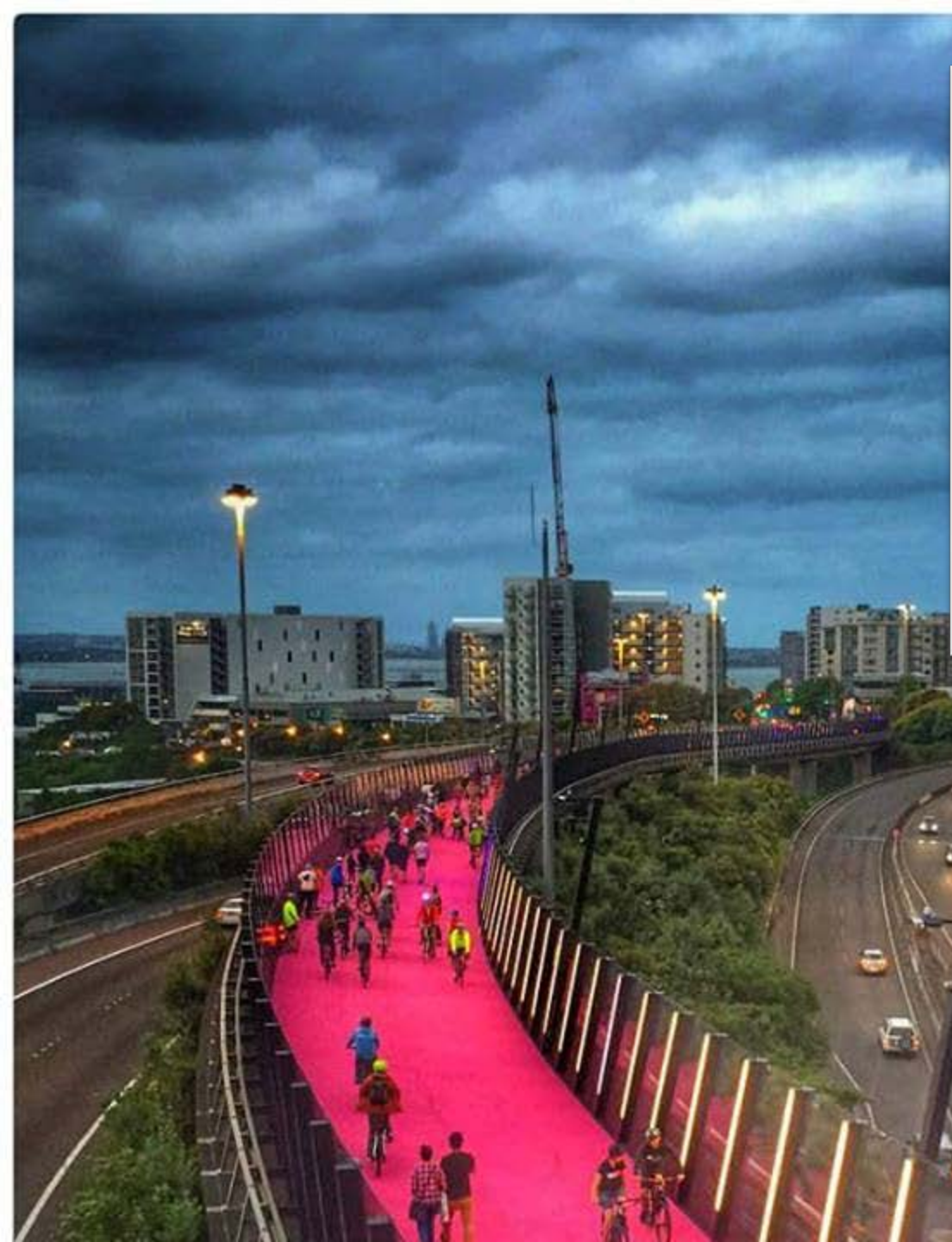
Q13: The pink colour bicycle path was ... ?

- A) Publicity for singer 'Pink'
- B) For Gay pride
- C) A photoshop joke
- D) To alert cyclists
- E) None of the above





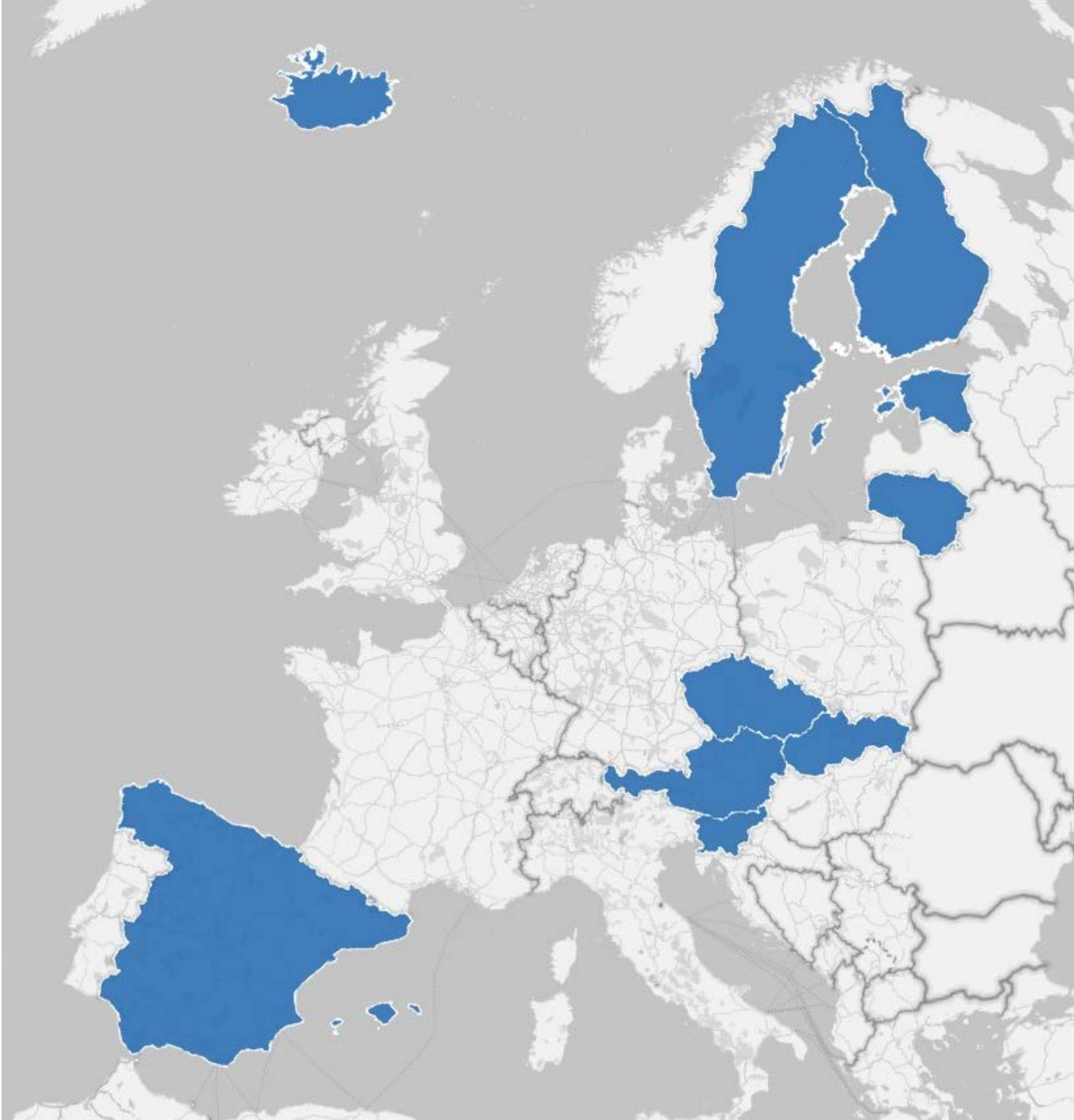
*Professor Alistair
Woodward,*
public health doctor
and epidemiologist,
New Zealand.



Q14: How many countries in Europe now have introduced (child) cycle helmet obligations?

10 countries have introduced (child) cycle helmet obligations:

- | | |
|---------------|---------------|
| 1. <i>AT</i> | 6. <i>SLO</i> |
| 2. <i>CZ</i> | 7. <i>SK</i> |
| 3. <i>FIN</i> | 8. <i>EE</i> |
| 4. <i>IS</i> | 9. <i>ES</i> |
| 5. <i>LT</i> | 10. <i>SE</i> |





ENDE

Thank you!

