

# Climate change surveillance - webinar

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5 September 2024



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# What is public health?

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*The science & art of promoting & protecting health & well-being, preventing ill-health & prolonging life through the organised efforts of society*

- population based
- emphasises collective responsibility for health, its protection and disease prevention
- recognises the key role of the state, linked to a concern for the underlying socio-economic and wider determinants of health, as well as disease
- emphasises partnerships with all who contribute to the health of the population

# Public Health surveillance?

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*The on-going, systematic collection, analysis, interpretation and dissemination of data about a health-related event for use in public health action to reduce morbidity and mortality, to improve health  
**and to narrow health related inequalities***

- Surveiller – to watch
- Information for action
- For communicable and non-communicable disease, but more experience with communicable

# One cold Saturday evening in February

Patient management / planning    Public health surveillance

- Broken leg x 3
- ED, WAST, in-patient
- T/O ward, surgery, physio, discharge to home / social care

- Broken leg x3
- 85-year-old female, fell
- 18-year-old male, road traffic crash,
- 28-year-old female, playing rugby



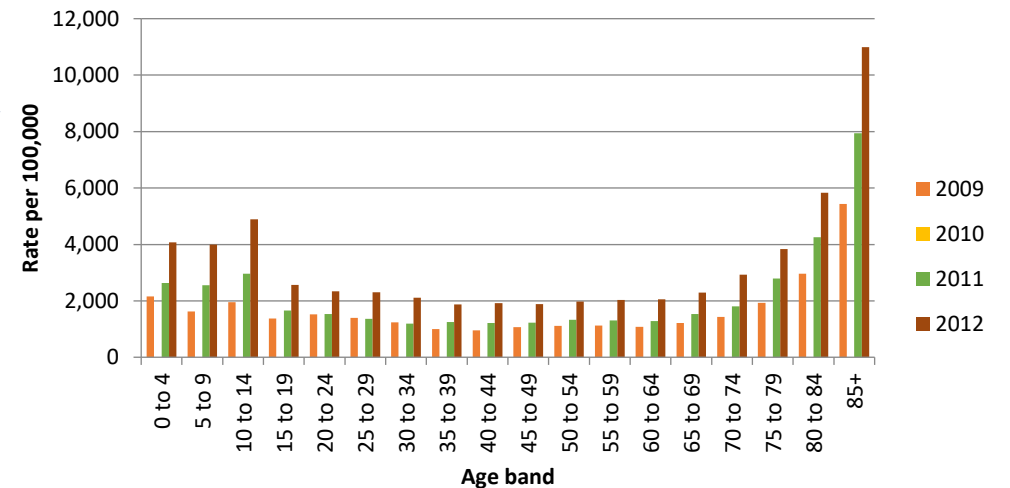
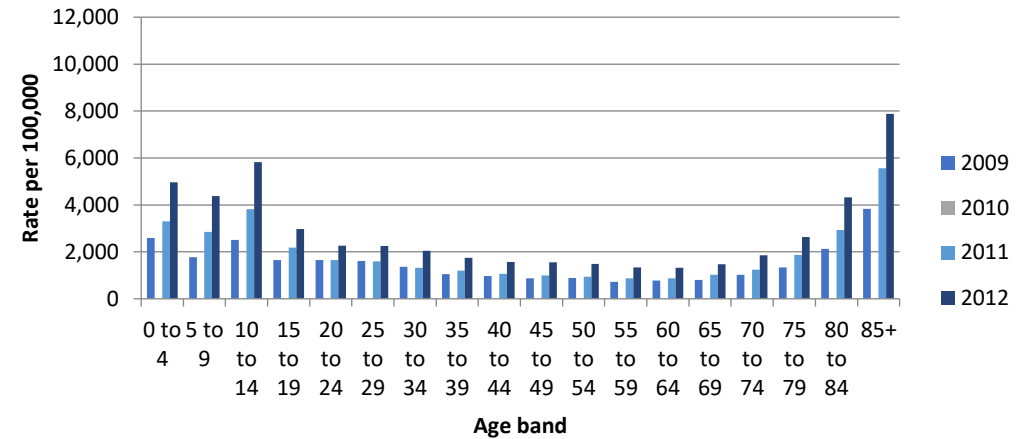
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# What are the actions?

## 85-year-old female, who fell (again)

- More data
- Evidence based intervention
  - primary care falls risk check (history of falling, medication review, timed-up and go)
- *Low vitamin D levels?*
- Needs the individual to engage
  - and keep engaging
- Service to deliver



# Falls surveillance

## Next steps

HB	DALYs	DALYs per 1000 popn	DALYs at rate of HB 5	DALYs Saved	% decrease
1	9469	13.8	5714	3755	39.7%
2	1424	10.7	1105	320	22.4%
3	4406	11.5	3170	1236	28.1%
4	6324	12.2	4299	2025	32.0%
5	3909	8.3	-	-	-
6	3799	13.0	2434	1365	35.9%
7	6654	11.5	4790	1864	28.0%
Total	35985	11.7	25430	10554	29.3%

# Falls surveillance

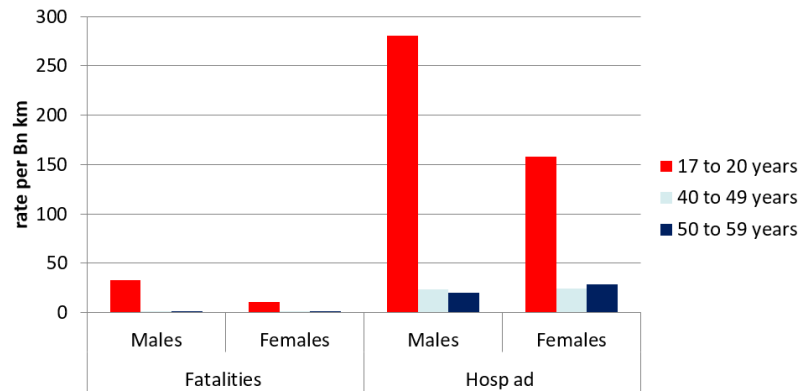
## What other actions does the evidence indicate?

- Regular eyesight / hearing checks
- Lifelong physical activity
  - Supported by sustainable transport and travel options, including well-maintained walking routes
  - Access to strength and balance training
- High quality housing
  - With support to identify and remediate slip / trip hazards
- High quality footwear
- Likely to be deprivation-based inequalities in access to the above

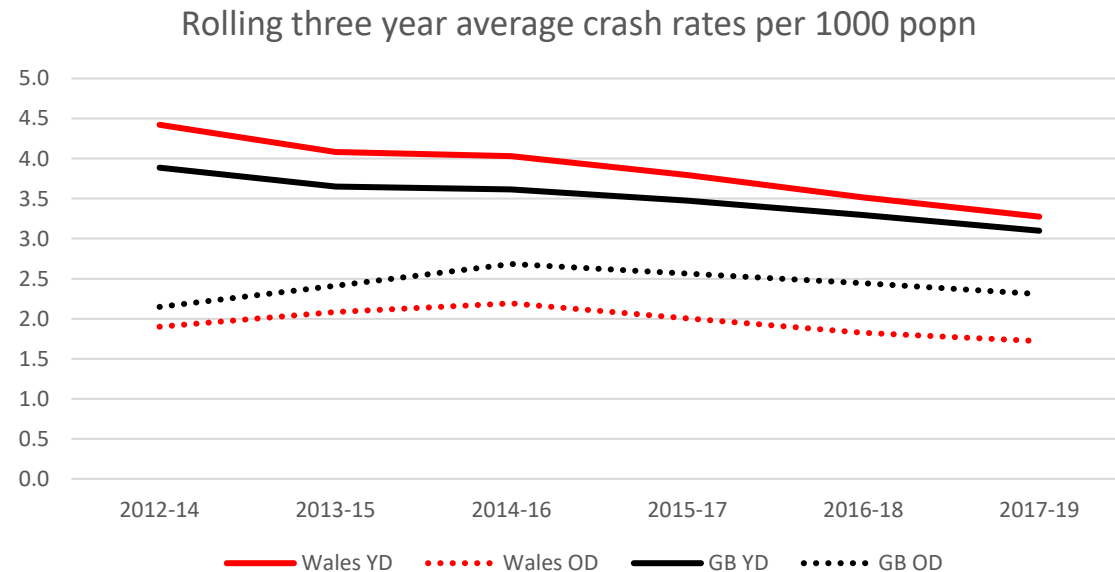
# What are the actions?

18-year-old male, RTC, lives in most deprived area

- More data



Mindell et al, 2012





# What are the actions?

## Young driver crashes

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- Young drivers at highest risk of crashing
- GDL is the most effective evidence-based intervention
- Driver licensing is reserved to Westminster

# What are the actions

28 year old female, playing rugby

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- Significant benefits to health and well-being of being physically active
- Intervention? Pitch inspection?
- Sufficient numbers of cases to identify an obvious intervention?
- Emerging evidence around footwear needing to be female, rather than unisex

# Thoughts on Actions and surveillance



- Unlikely to be a single action
  - Multiple actions to contribute to prevention
- Challenge of small numbers
- Structural changes v individual behaviour change
- Temptation to “predict”... induced demand
- Lots of partners need to act to bring about change
- More partners, more time, more money?
- Public Health role – advocate from an evidence-based position

# Questions...?

- Are there acute health effects of wildfires on people in Wales?
  - If there are, what are the actions that are needed to reduce these?
- Are there specific population groups and geographical areas at higher risk of heat related illness in Wales?
  - What temperatures do these occur at? Is this the same across Wales? How do the effects change in different settings?
- To what extent have previous flooding incidents affected the incidence and prevalence of mental health harms?
- Are specific population groups at higher risk of CO poisoning?