

The Economic Case for Prevention

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and Practice Conference
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Dr Carolyn Harper, Director of Public Health

Overview

“An ounce of prevention is worth a pound of cure”Benjamin Franklin

A healthy population = A healthy economy

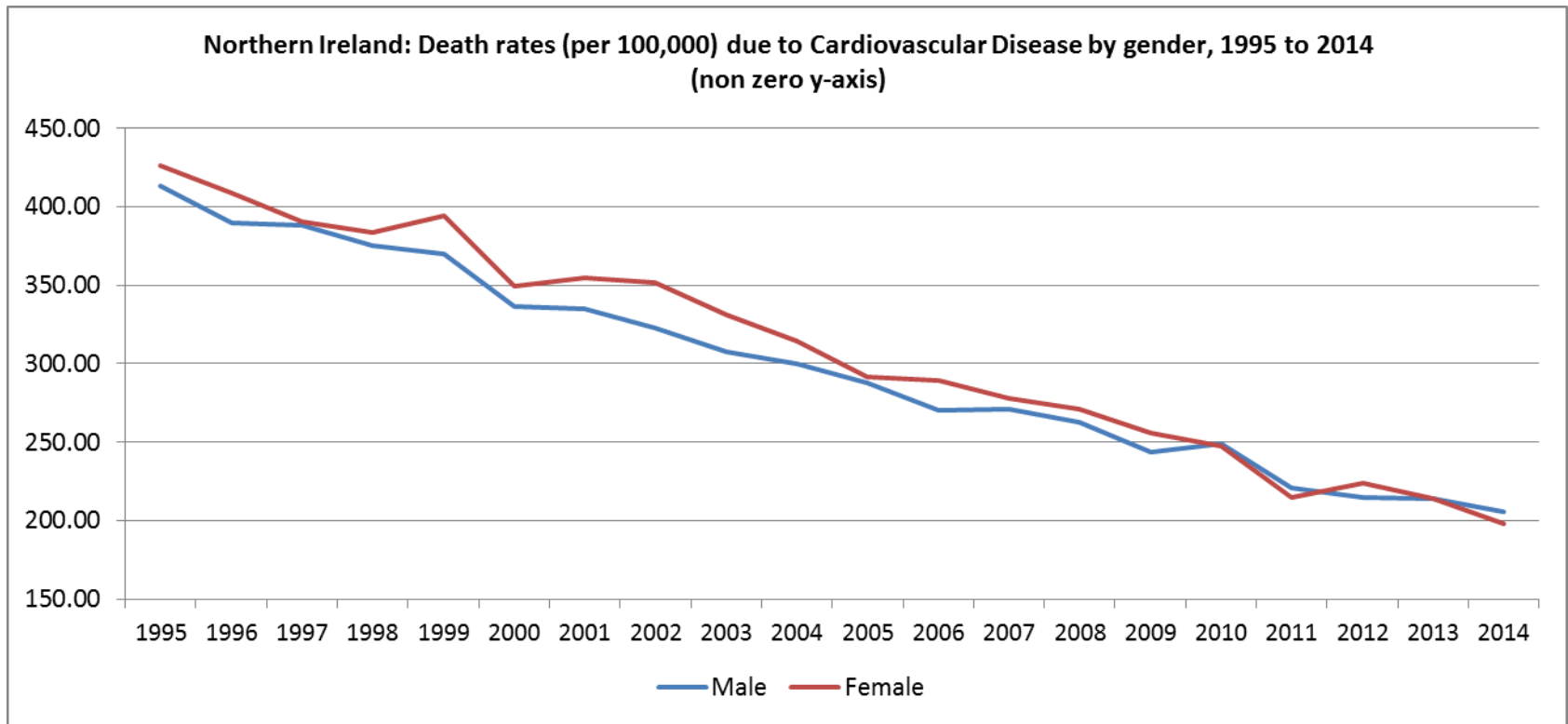
See www.gapminder.org

Key examples where the PHA & partners are improving health and generating cost savings

Health Improvement

- CVD mortality
- Tackling Primary risk factors for Chronic Disease – Smoking, Physical Activity, obesity
- Breastfeeding
- The Role for Legislation and Taxation – MUP of alcohol of 50p, 20 miles/hour speed limits

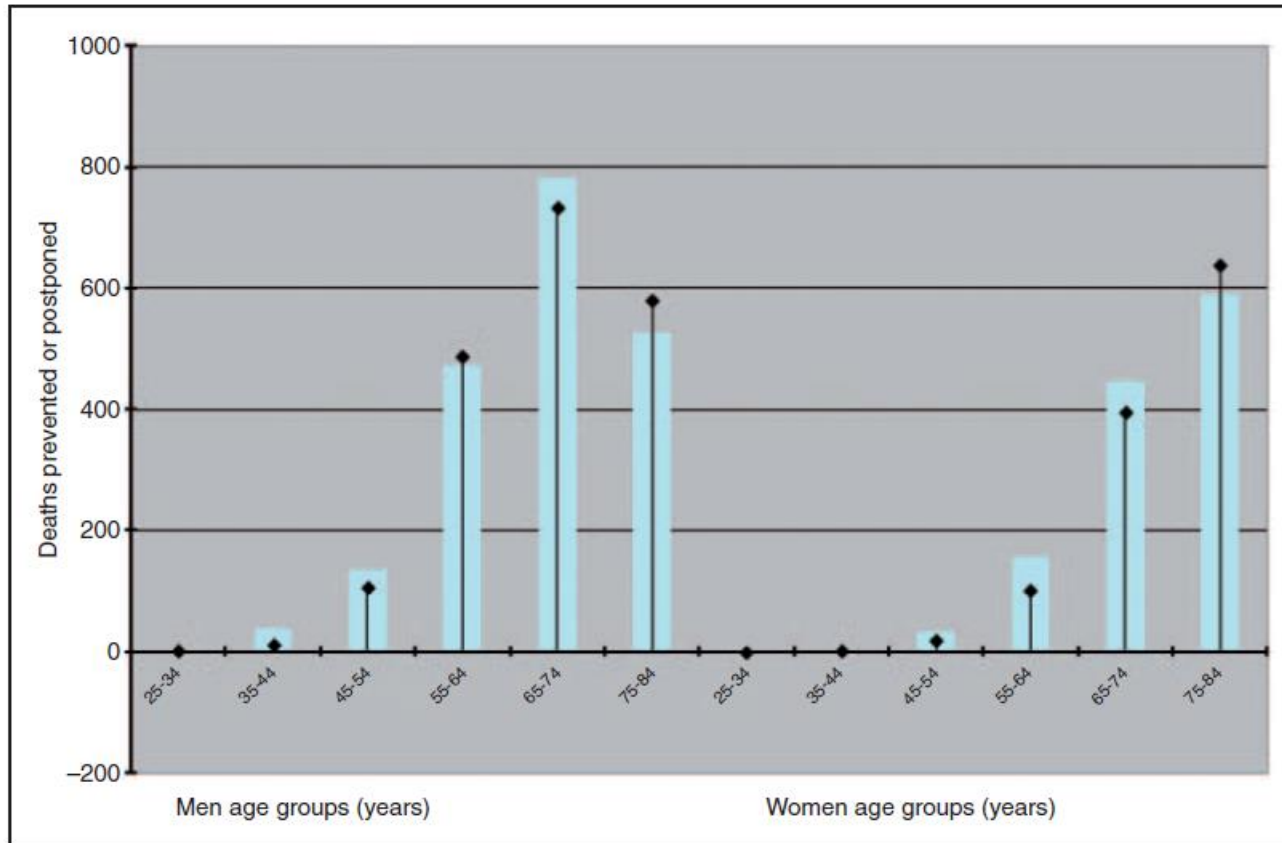
Deaths from CVD have more than halved 1995-2014



35% attributable to increased uptake of medication
60% to reduced risk factors: BP, cholesterol, smoking

Source: NISRA

Total cardiovascular deaths prevented or postponed, from 1987 – 2007, by age and sex



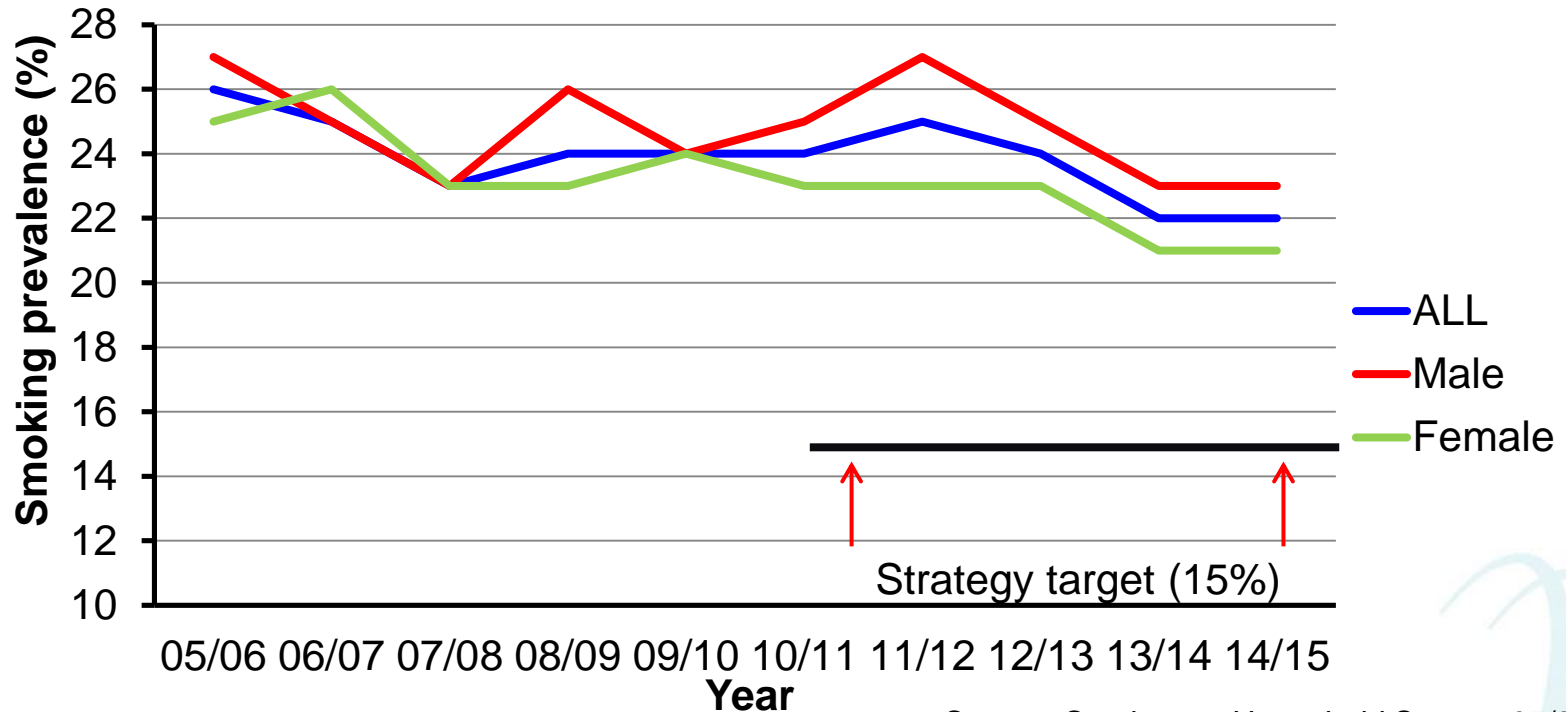
Total = 1,900
deaths prevented

Value = £3billion
(over 20 yrs)

*VSL £1.7million

Source: Hughes et al. Eur J Prev Cardiol, 2013

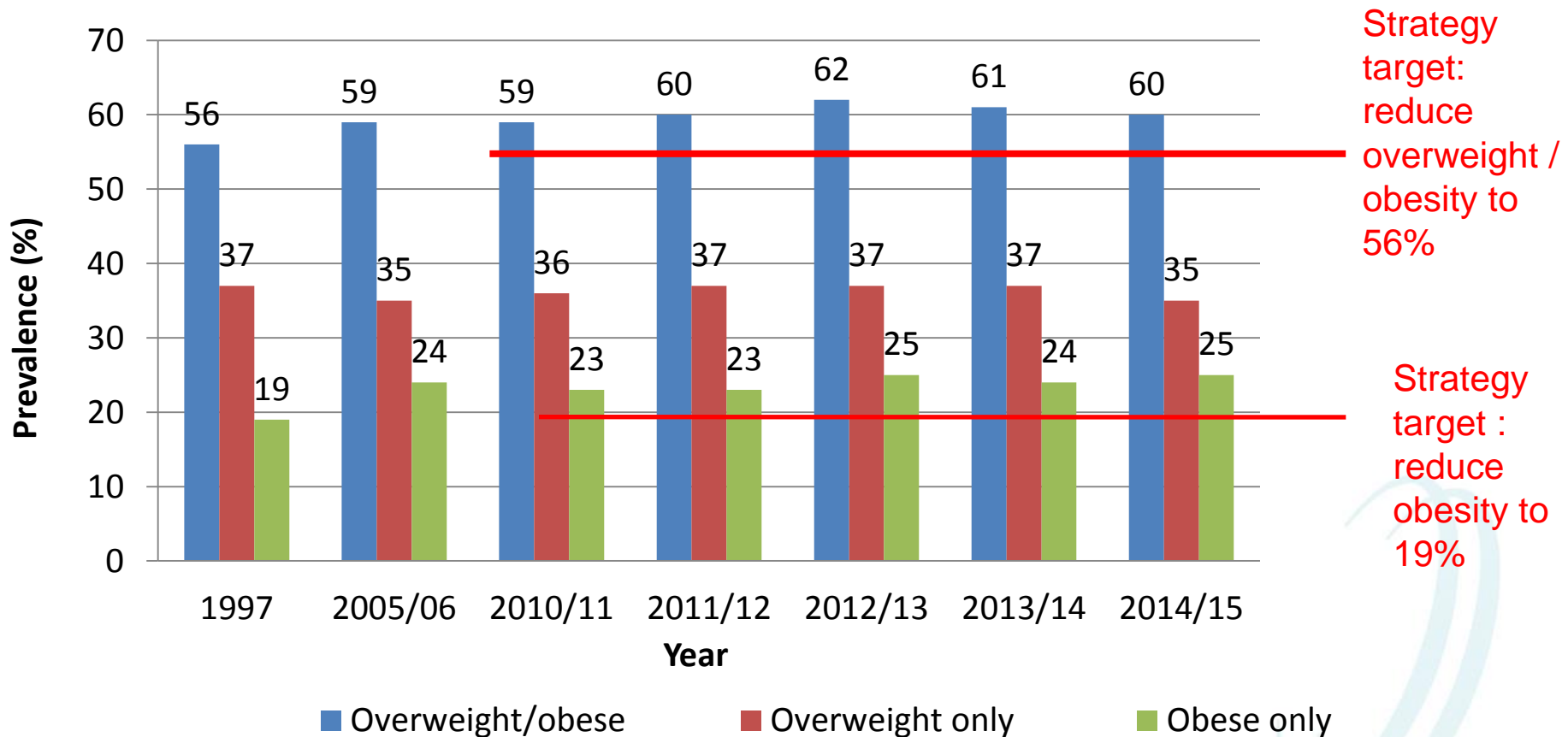
Smoking prevalence in Northern Ireland - the last decade (05/06-14/15)



Source: Continuous Household Survey; 05/06-09/10. Northern Ireland Health Survey 10/11-14/15

Every 1% decrease in prevalence of smoking yields a cost saving of £7.5m in terms of healthcare costs and £19.6m to NI economy

Prevalence of overweight and obesity among adults (aged 16+) in Northern Ireland 1997- 2014/15



Source: Health and Social Wellbeing Survey 1997, 2005/06. Northern Ireland Health Survey 2010/11 – 2014/15

CMO physical activity recommendations : UK comparisons

	Met CMO physical activity recommendations (%)*
England (2012)	60
Scotland (2014)	63
Northern Ireland (2014)	53

* Current CMO (Chief Medical Officer) recommendations are 150 minutes per week moderate activity or 75 minutes vigorous activity or an equivalent combination of these. No data is presented for Wales as Wales are reporting on the pre 2011 recommendation : ie the percentage of the population doing at least 30 minutes of at least moderate activity on 5 or more days in the previous week.

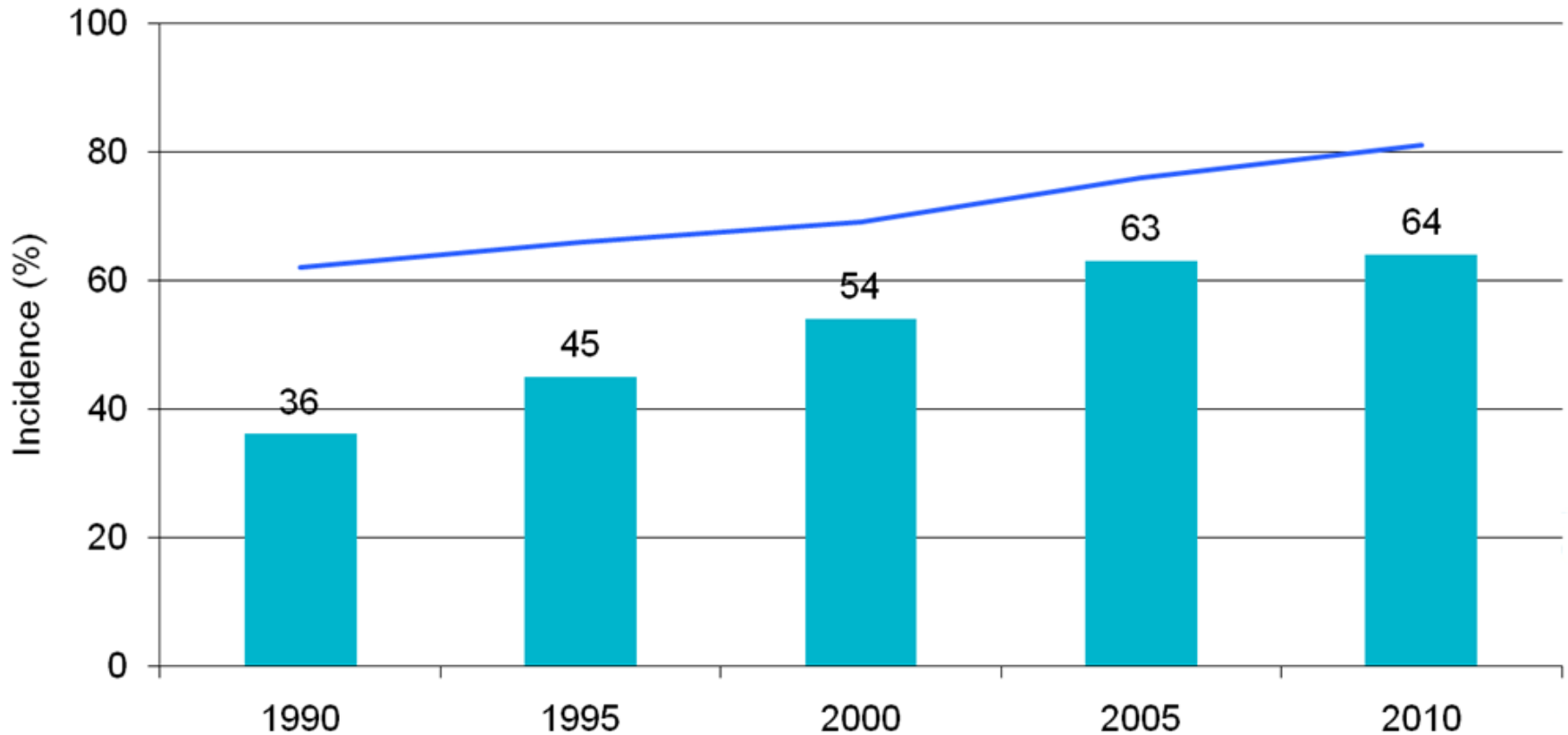
Source: Northern Ireland Health Survey. Scottish Health Survey, Health Survey England, England and Scotland are calendar year surveys , Northern Ireland is a financial year survey 2013= 2013/14.

Tackling obesity & physical inactivity levels

- Connswater Community Greenway – ROI of 2-6 times over 40 years in terms of health, environmental and economic outcomes
- Healthwise GP Exercise Referral scheme – For every £1 invested, project generates a return of approx £7 in economic and social outcomes
- £ for lb Challenge - £2.51/kg of weight lost

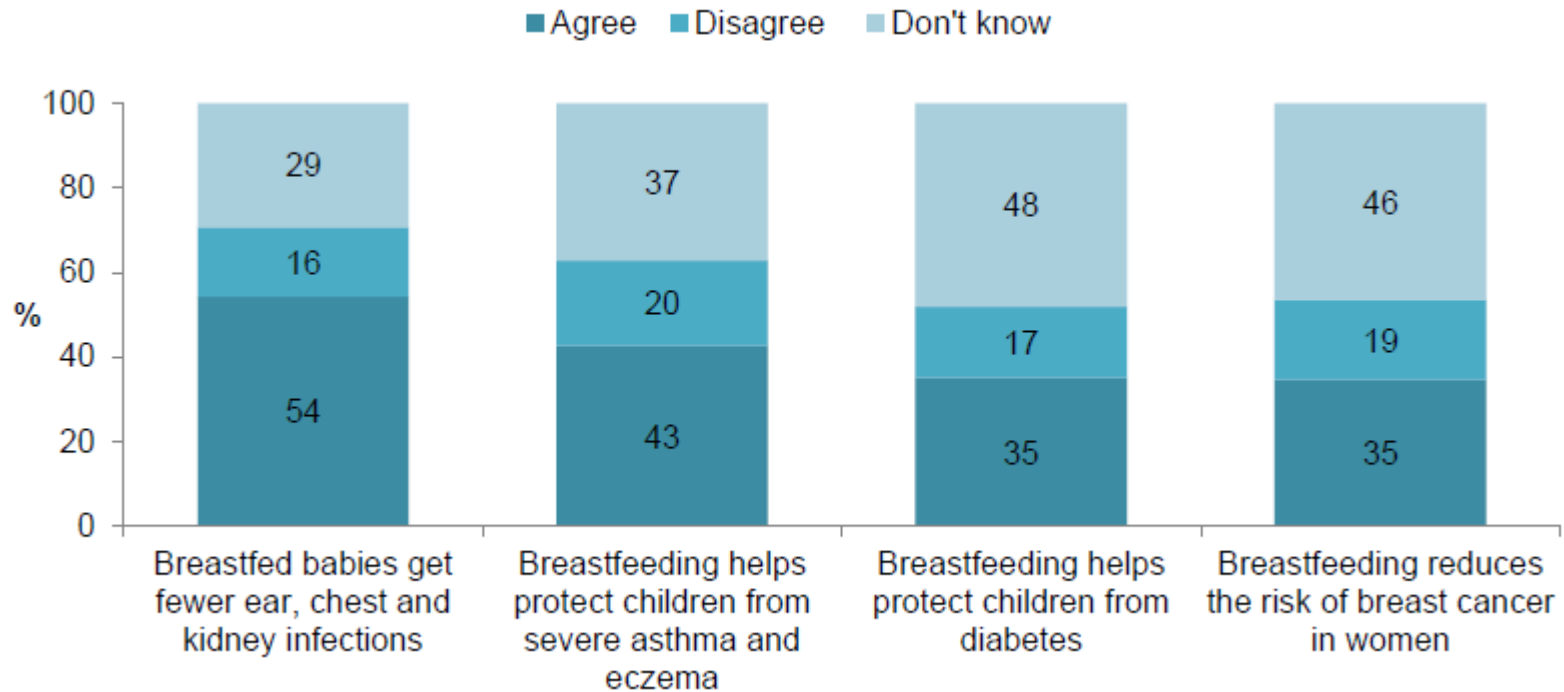
Incidence (%) of breastfeeding in Northern Ireland, 1990 - 2010

■ Northern Ireland — UK



Source: UK Infant Feeding Survey www.ic.nhs.uk

Opinion on breastfeeding protecting from disease (females only)



Source: Health Survey for NI, 2012-13

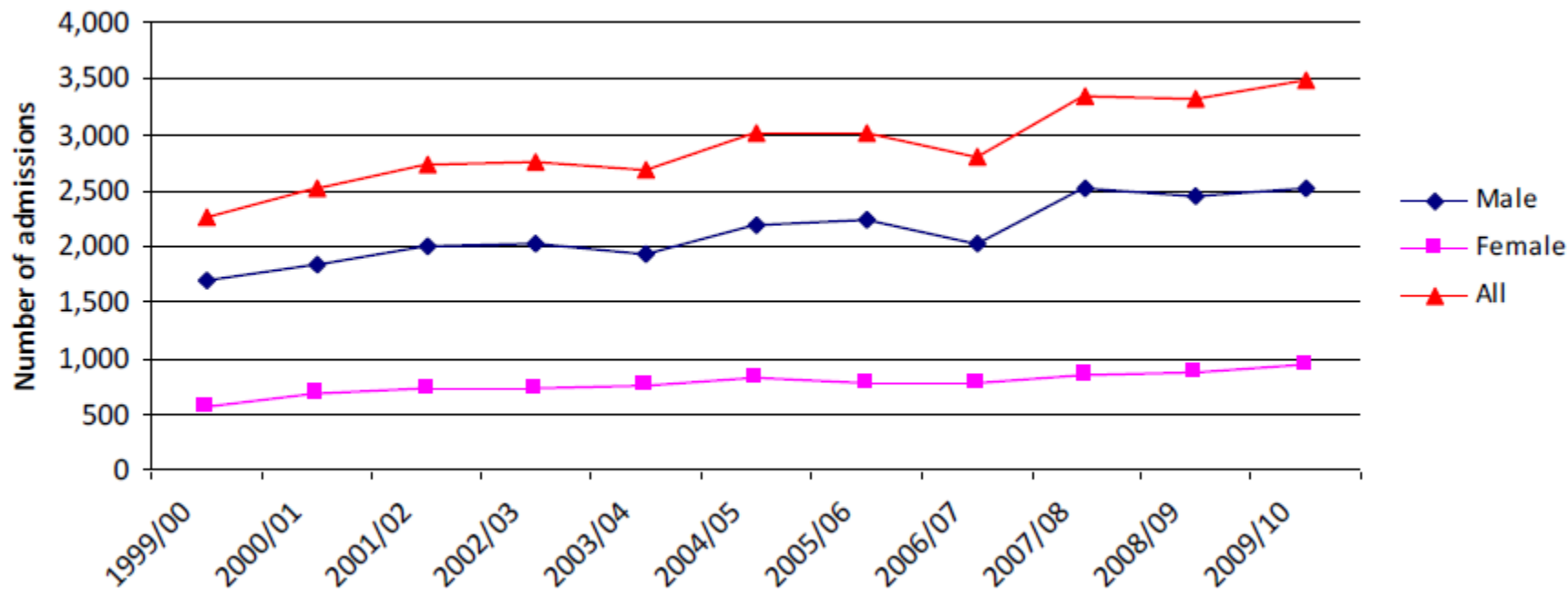
If UK rates of exclusive breastfeeding up to 6 months, increase by 10% = £6.5m UK healthcare cost savings/year

The Role for Taxation & Legislation

Examples

- Alcohol : MUP of 50p
- Road Traffic Collisions : 20miles/hr speed limit

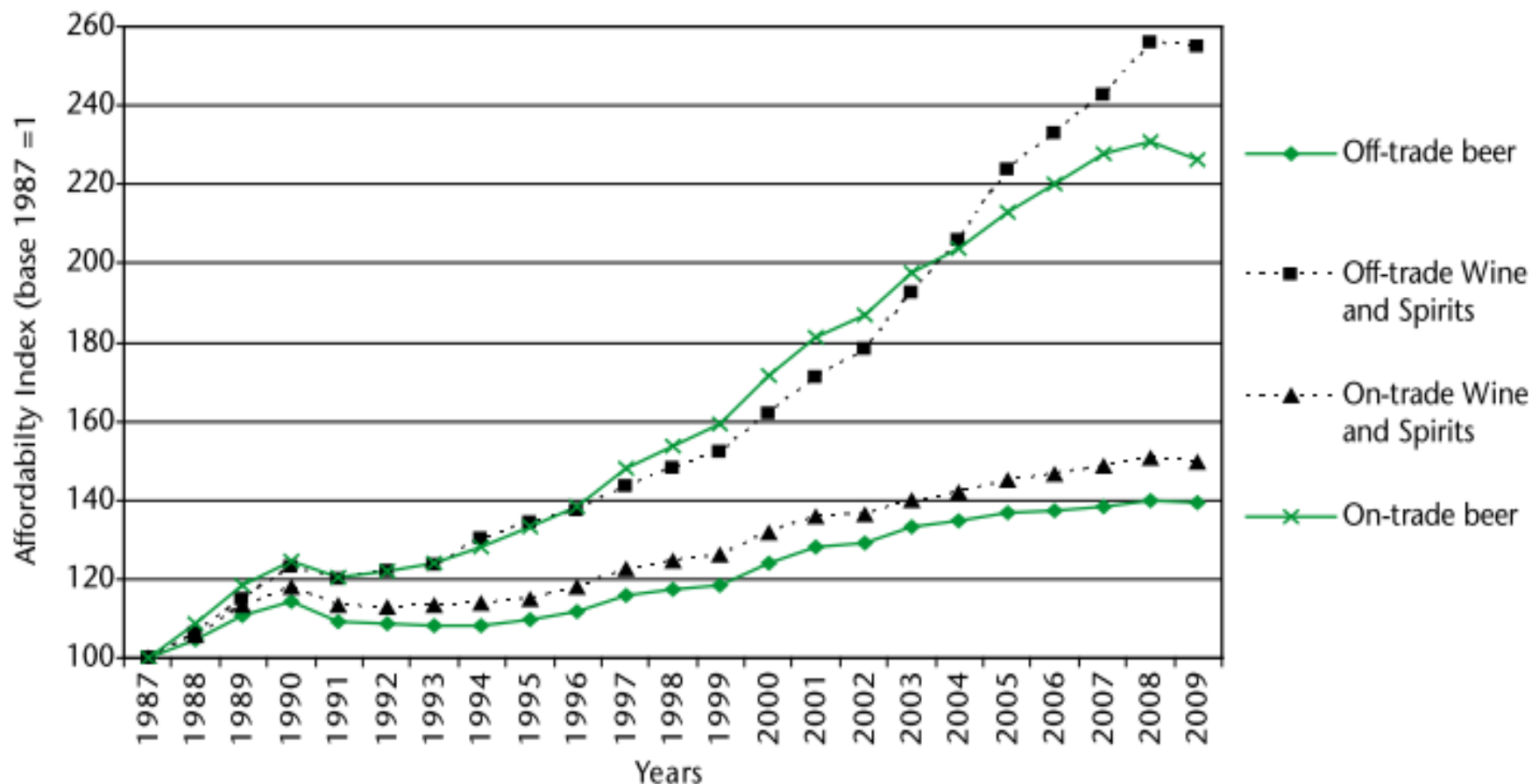
Admissions to HSC hospitals with an alcohol related diagnosis from 1999/2000 to 2009/2010



Source: Alcohol use and alcohol related harm in Northern Ireland, Health Intelligence Briefing, PHA, 2011

In NI, alcohol costs the health service £250million/year & £900million/year in total societal costs

Figure 8: Affordability of alcohol by type and source, 1987 - 2009



Source: Focus on Consumer Price Indices, July 2010 and Economic and Labour Market Review, July 2010: Office for National Statistics

Estimated Impact of 50p MUP of Alcohol

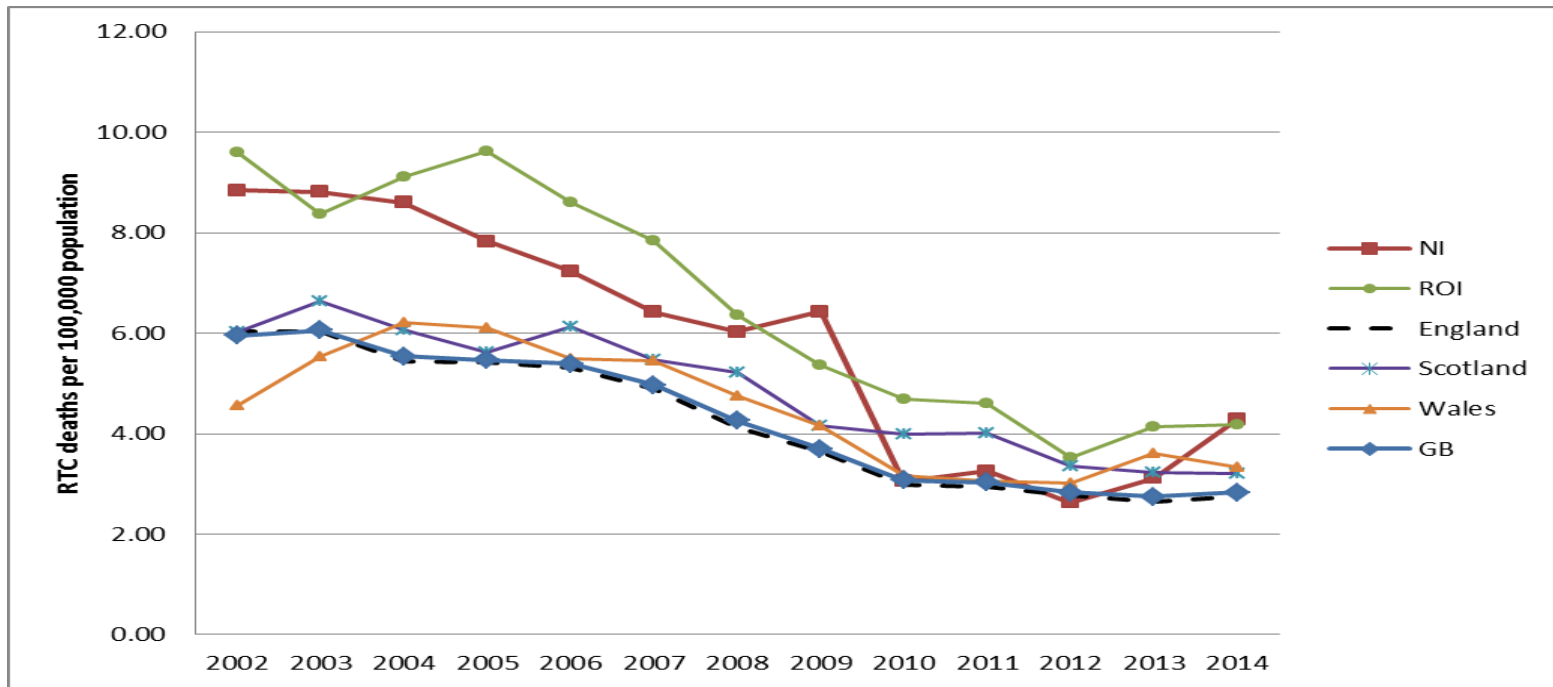
63 lives saved & 2,425 hospital admissions avoided

Cost saving: £1.8m in yr1 and £397m over 20yrs

5,293 criminal offences & 35,000 days off sick avoided

Cost saving: £956m over 20 yrs

Road Traffic Collisions



Source: Health Intelligence, PHA

789 killed or seriously injured on NI roads in 2014

39% of fatal collisions due to speeding

Cost of speeding in 2014: £262million

Screening & Health Services

Colorectal Cancer Screening

- Approx. 7,764 people in NI living with bowel cancer = £20m/year spent on treatment costs
- Earlier diagnosis – increases survival and is less costly to treat

	Lifetime treatment cost	5 year survival
Dukes A - EARLY	£12,455	>90%
Dukes D - LATE	£25,703	<10%

Colorectal Cancer Screening

- Of screen detected cancers in 2013/14 – 59% were at an early stage
- 648 participants had polyps detected and removed

	Dukes A - EARLY	Dukes D - LATE
2009 Pre screening	14%	23%
2013 Post screening	22%	18%

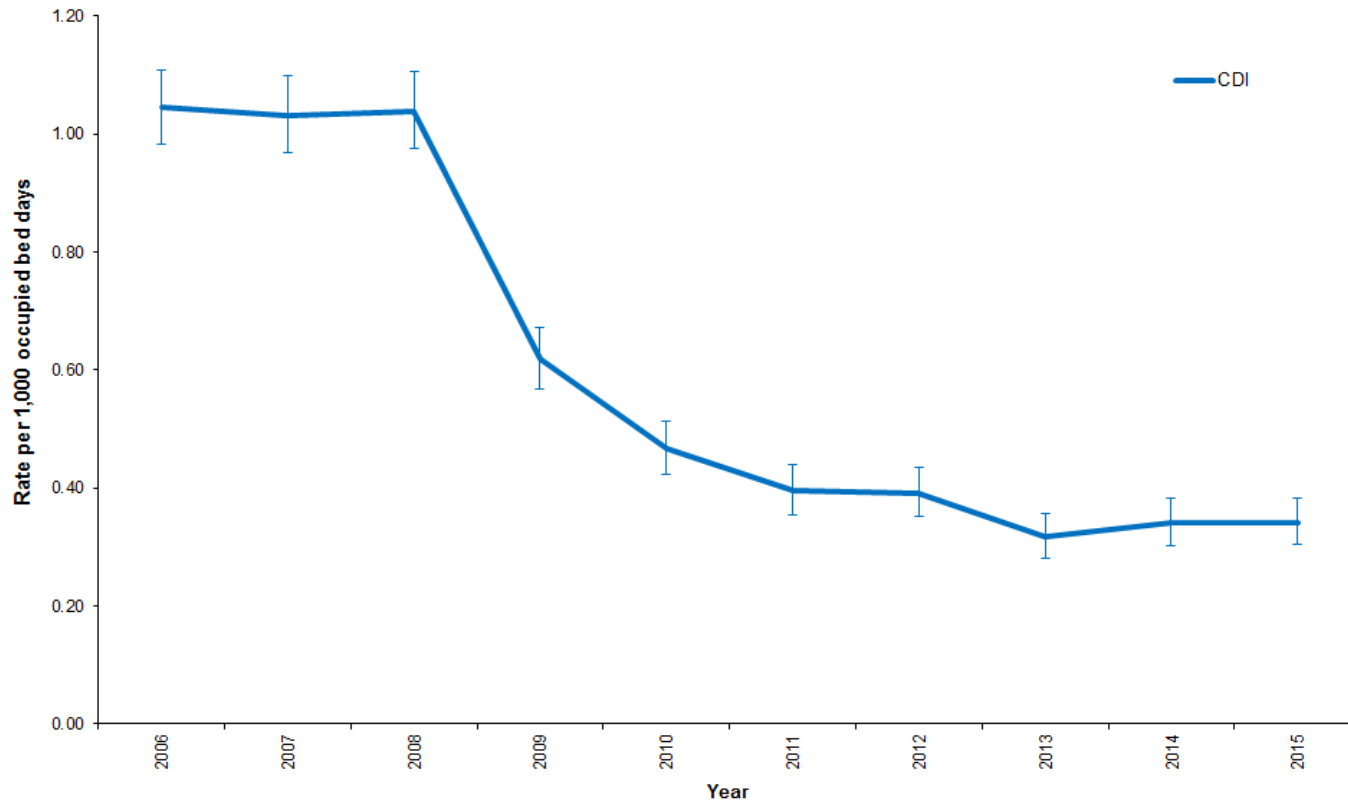
Source: NICR

Health Protection



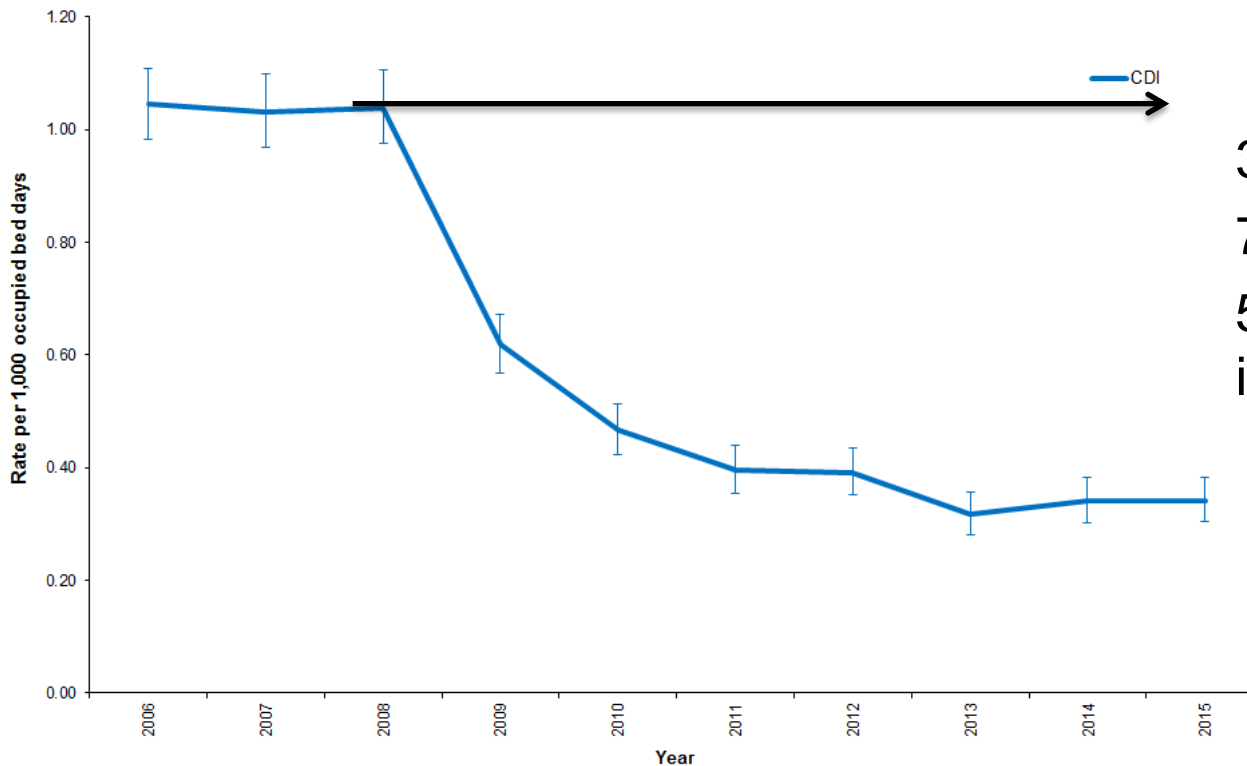
Health Care Associated Infections

Clostridium difficile infection rate for patients in the hospital setting, aged 65 years and older from 2006-2015



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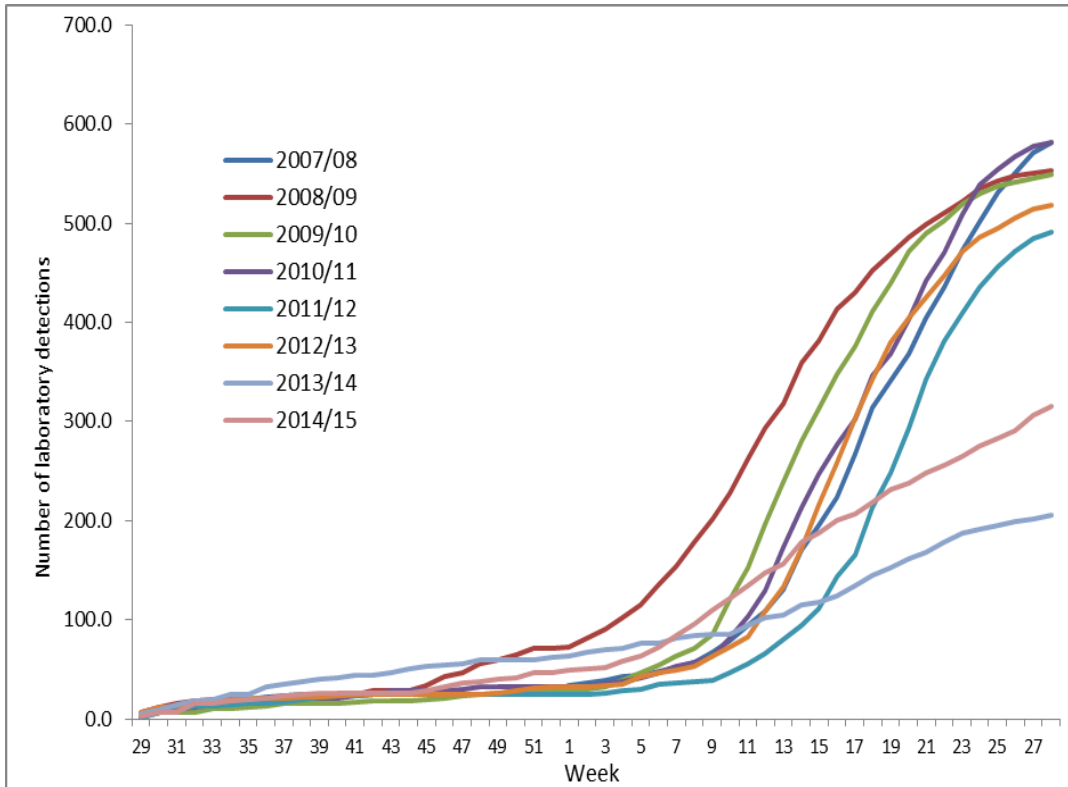


Prevented:
3,263 CDI cases
719 MRSA cases &
537 Surgical site
infections

**Cost saving: £34m
over 8 years**

Rotavirus Vaccine

Cumulative rotavirus laboratory detections in NI by season/week



54% reduction in detections

Prevented:

1,000 Hospitalisations
1,362 ED attendances &
6,460 GP attendances

**Cost saving: £1.1-1.2m
over 2 years**

Conclusion

- Public health = good economic investment
- Cross-governmental funding allows delivery of large scale interventions – PfG outcomes approach helpful
- Need action across the broad public health agenda to achieve the greatest population health gain
- When funding is tight (& even when it isn't!), investment in prevention makes sense – for accountants & the public

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Acknowledgements

Editorial Team

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Partner organisations

Public health practitioners & researchers