

Meeting the Challenge of Noncommunicable Diseases and Injuries in the CIS Countries, 30 – 31 October 2007, Moscow, Russian Federation

Priority interventions for meeting the challenge of injuries

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Overview

Road safety, health losses and related risk factors.

Case studies of priority interventions.

Moving from knowledge to action.

Necessary steps.

World Bank initiatives.

Road safety

Road traffic injuries contribute significantly to the national injury burden and associated health losses.

High-income countries have successfully invested in reducing this burden and have demonstrated that effective interventions are feasible and sustainable.

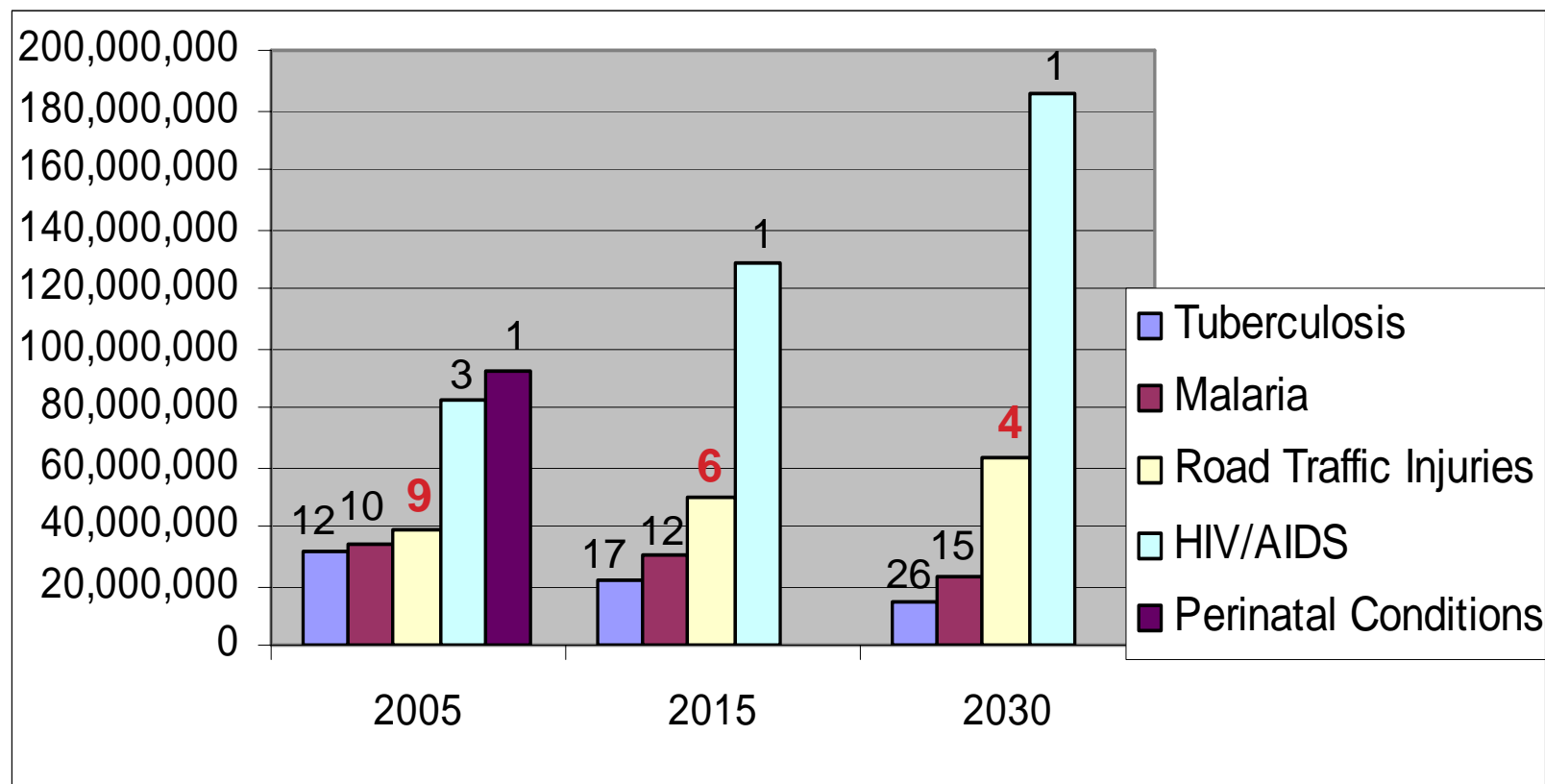
However, in low and middle income countries the situation is deteriorating and will get worse, unless new measures are taken to address this crisis.

Health losses from crashes

Road crash deaths and injuries in low and middle-income countries are projected to be the 4th largest cause of healthy life years lost by the total population in 2030, compared with tuberculosis (26th) and malaria (15th).

Road deaths are projected to be the leading cause of health losses for children (age 5 – 14) by 2015, and the second cause for men by 2030.

DALYS in low and middle-income countries (total population)

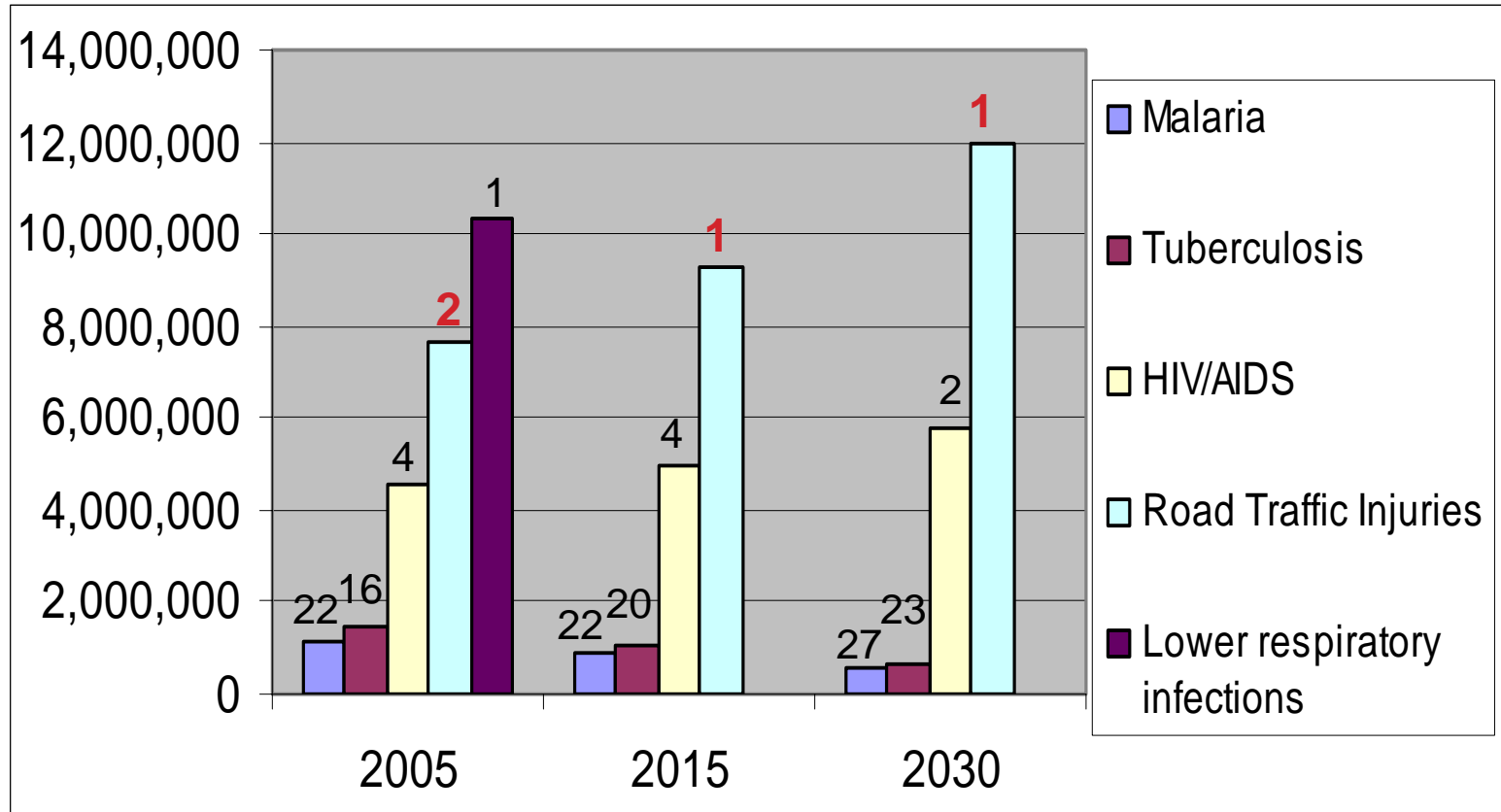


Source: Mathers C, Loncar D. Updated projections of global mortality & burden of disease, WHO, 2005



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DALYS in low and middle income countries (children age 5-14)

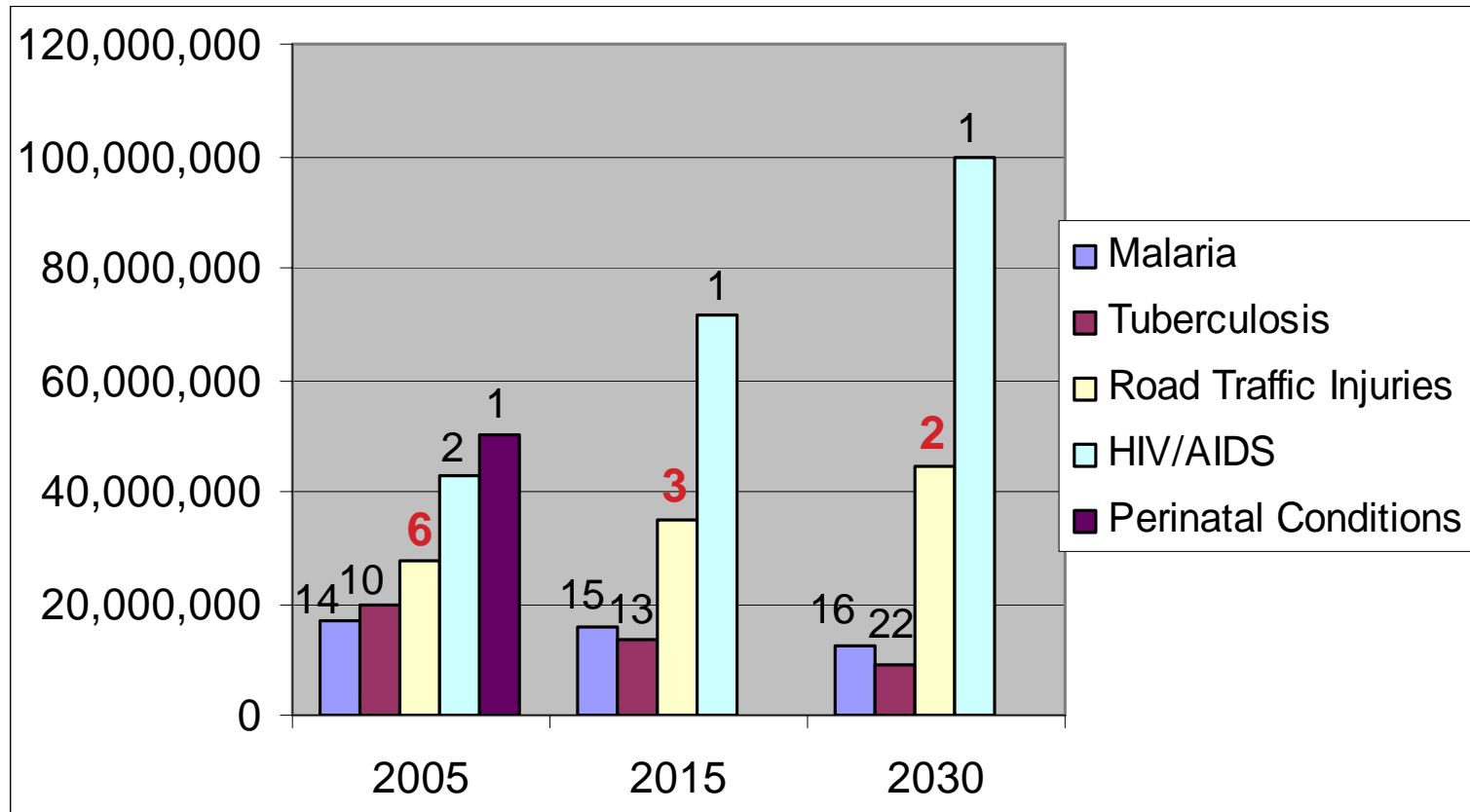


Source: Mathers C, Loncar D. Updated projections of global mortality & burden of disease, WHO, 2005



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DALYS in low and middle income countries (male population)



Source: Mathers C, Loncar D. Updated projections of global mortality & burden of disease, WHO, 2005



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Burden of injuries in Eastern Europe & Eurasia

Major cause of East-West gap in mortality at all ages (death rates are about 60 % higher in Central/East compared with West Europe).

People in Eastern Europe & Eurasia region are three times more likely to die from injuries than in the high-income countries of Europe.

Source: Hyder, A. Burden of Injuries and Road Safety in Eastern Europe and Russia, 2007.

Road traffic injuries in Eastern Europe

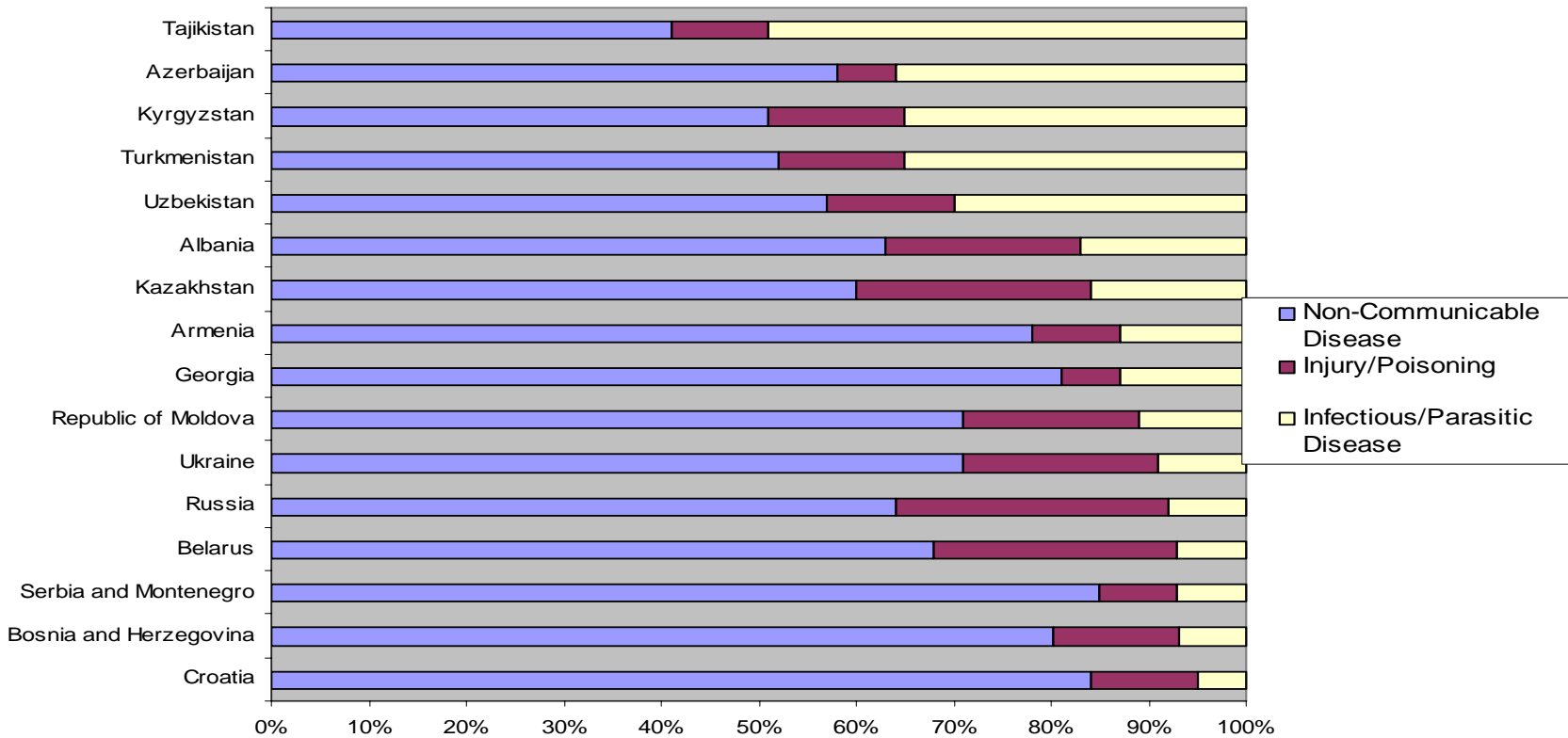
6th leading cause of DALYs in Eastern Europe.

About 2.4 million people every year injured in RTI.

Annual cost of road crashes is about 1.5% of GNP, totaling about US \$9.9 billion.

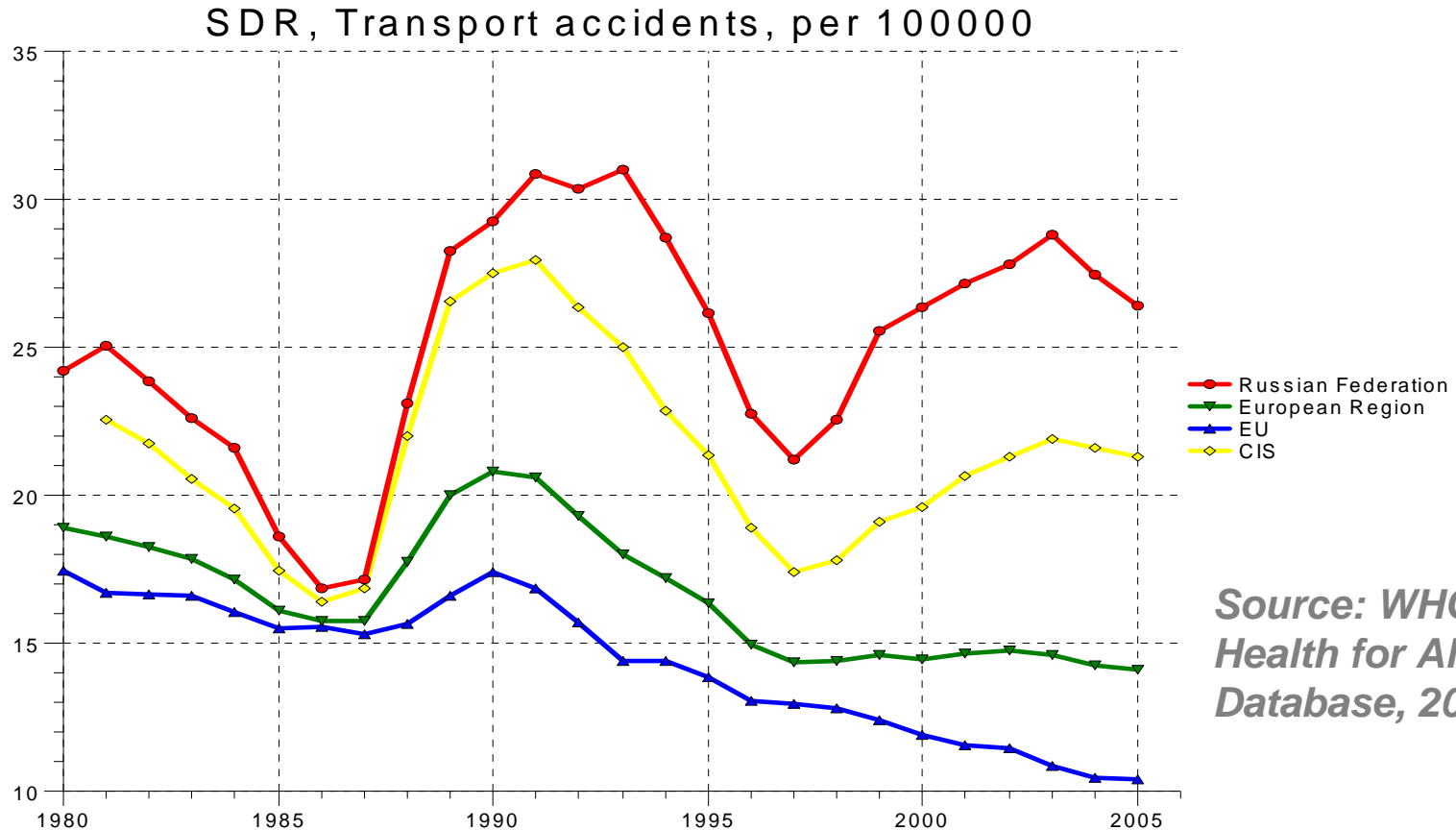
Source: Hyder, A. Burden of Injuries and Road Safety in Eastern Europe and Russia, 2007.

Life years lost by cause (%)



Source: Hyder, A. *Burden of Injuries and Road Safety in Eastern Europe and Russia, 2007.*

Mortality rate trends (per 100,000 people)



Source: WHO, Health for All Database, 2007

Situation in Russian Federation

35,000 deaths and 250,000 injured (2004). Societal cost 2.5% of GDP. 700,000 hospital admissions.

42% of the deaths were pedestrians, the highest pedestrian mortality rate in Europe.

Alcohol involved in 20% of crashes. Seat belt wearing low at 20%

Source: ECMT, WB, WHO: Road Safety Performance National Peer Review: Russian Federation, 2006

Risk factors

The main risk factors for road traffic injuries are factors influencing:

- *Exposure to risk*
- *Crash involvement*
- *Crash severity*
- *Post-crash severity*

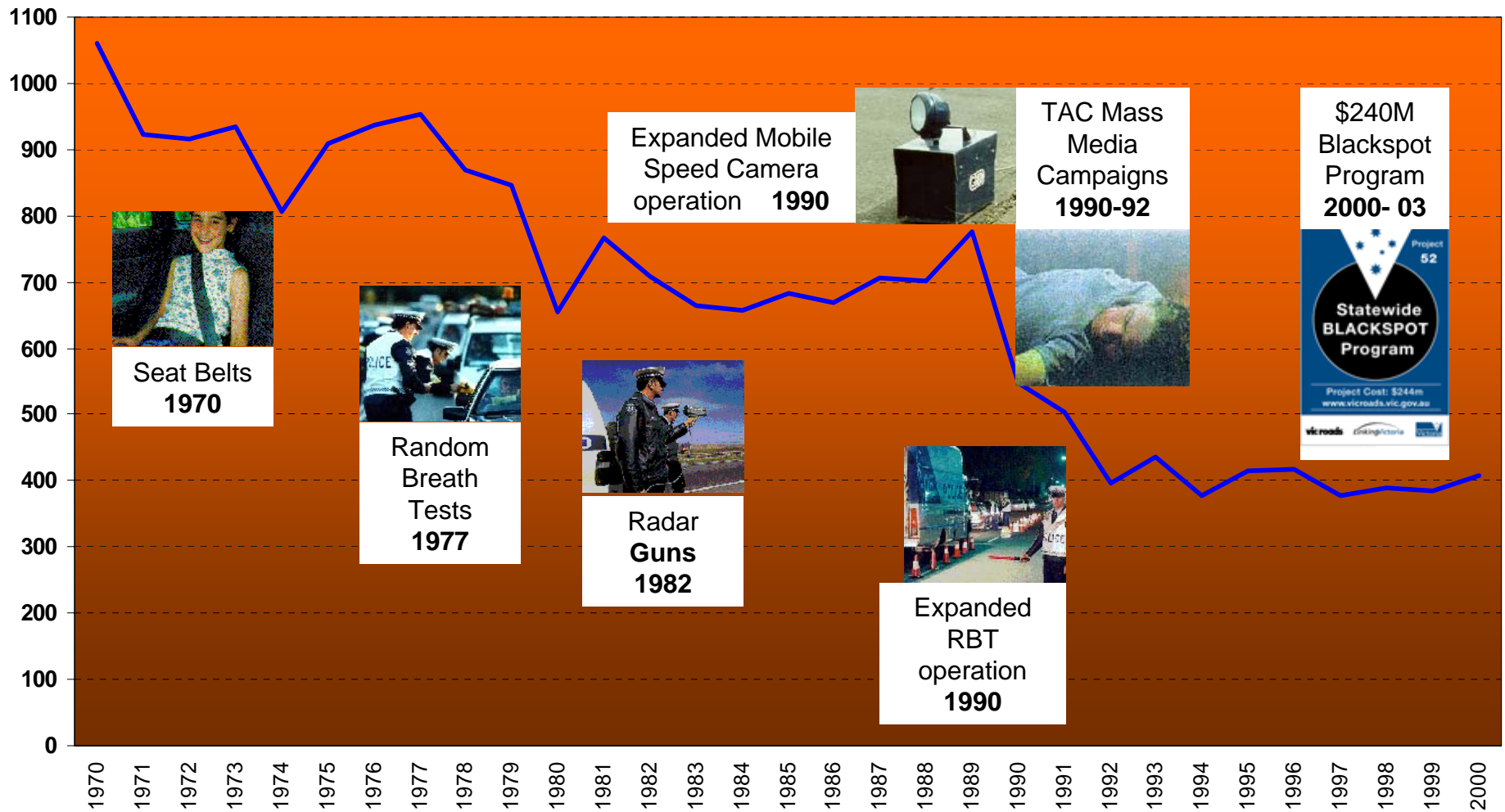
Successful national road safety programs systematically address these risk factors with interventions clearly focused on targeted results.





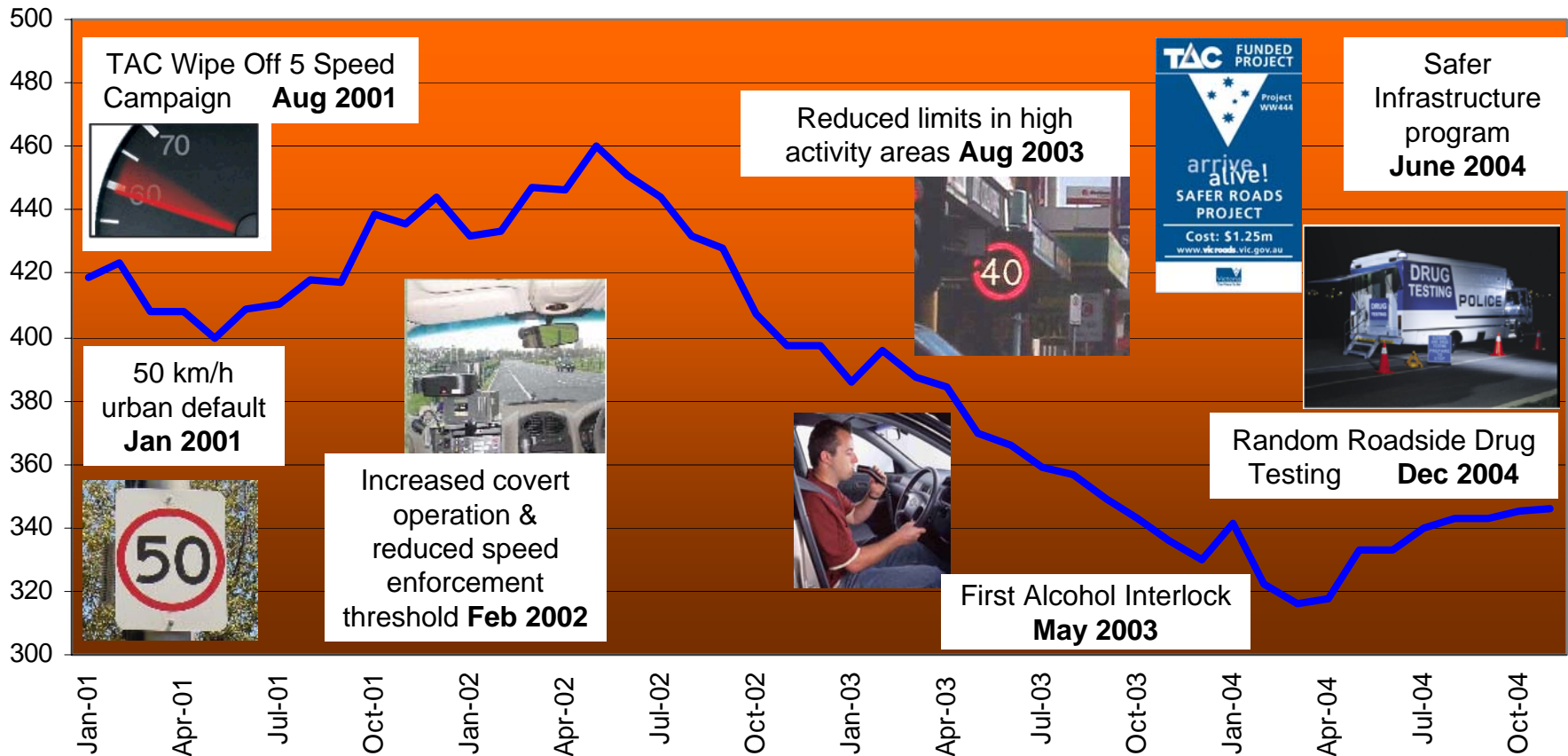
Case Study 1
Victoria, Australia

Victoria, Australia



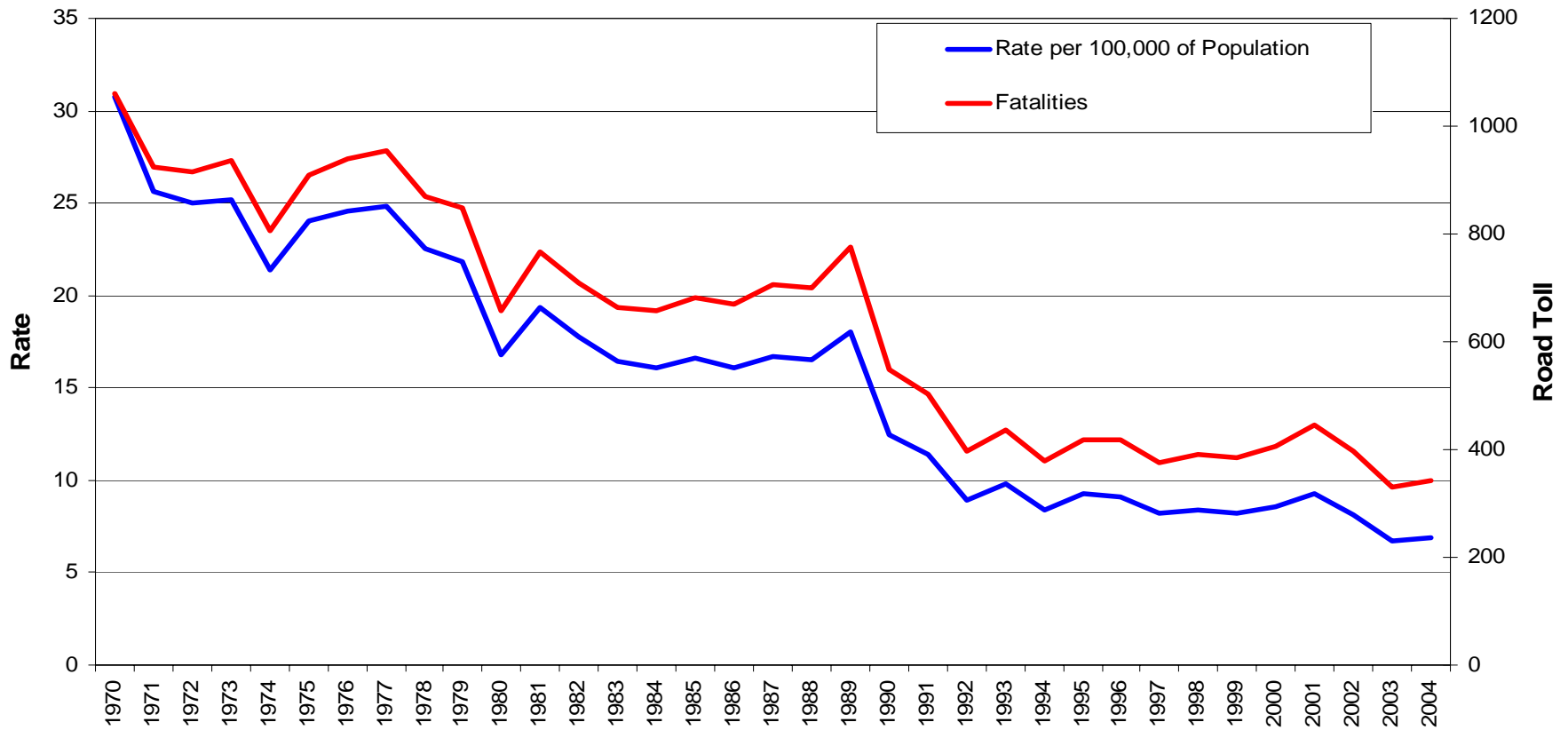
Victoria, Australia (cont'd)

Victorian Fatalities Rolling 12 Month Totals - Jan 2002 to Nov 2004



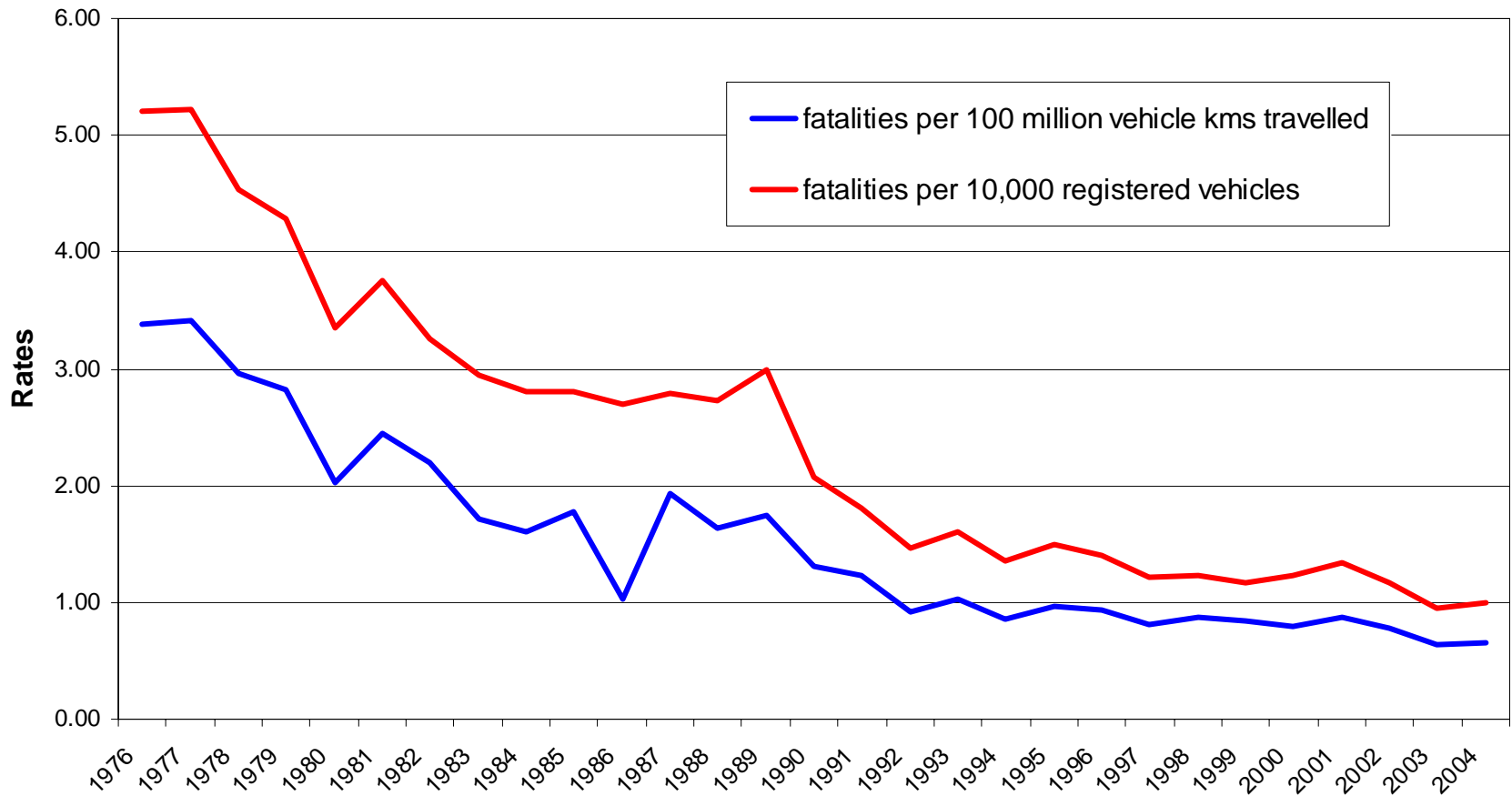
Results achieved

Victorian road fatalities and rates per 100,000 of population
1970 - 2004



Results achieved (cont'd)

Victorian fatality rates



Notable features

Powerful health sector advocacy.

Sustained bi-partisan political will and strong inter-agency partnerships.

Robust law enforcement.

Continuous introduction of new priority interventions, to keep driving deaths and injuries downwards.



Case Study 2
New Zealand

National Road Safety Plan

Implemented in 1990 with four main themes: safer roads, safer vehicles, safer people and safer management systems.

Fatality and injury reduction targets were set for achievement by 2000.

Revised in 1995 to reflect new institutional arrangements and to set more ambitious targets.

Results achieved

Road safety performance showed continuous improvement throughout the implementation of the plan and beyond.

The incremental benefit-cost ratio of the total plan was high (around 12:1).

Deaths per 100,000 people reduced from 21.7 in 1990 to 10.3 in 2002.



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Results achieved (cont'd)

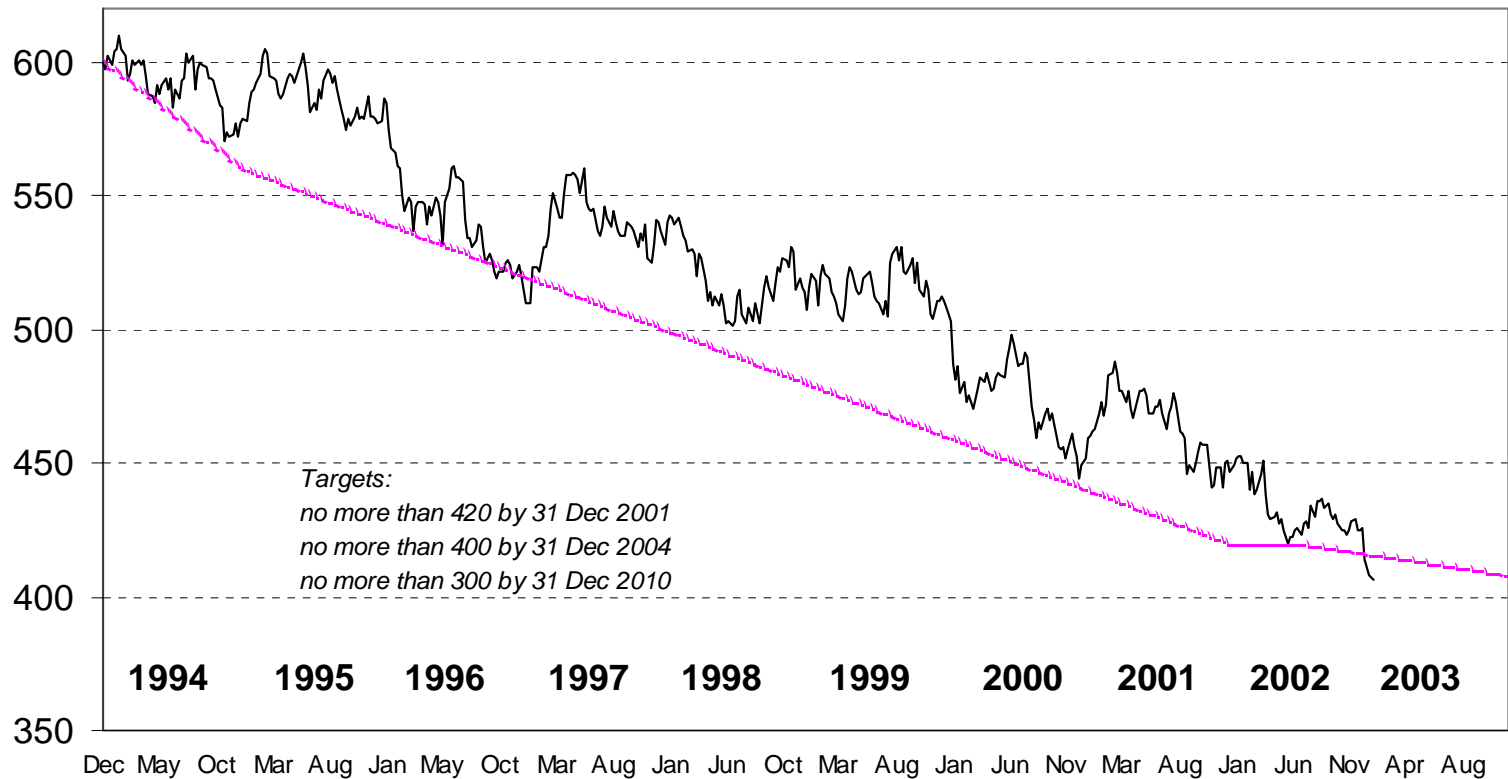
Deaths per 10,000 vehicles reduced from 3.6 in 1990 to 1.5 in 2002.

The percentage of dead drivers over the legal blood alcohol limit reduced from 46% in 1990 to 24% in 2002.

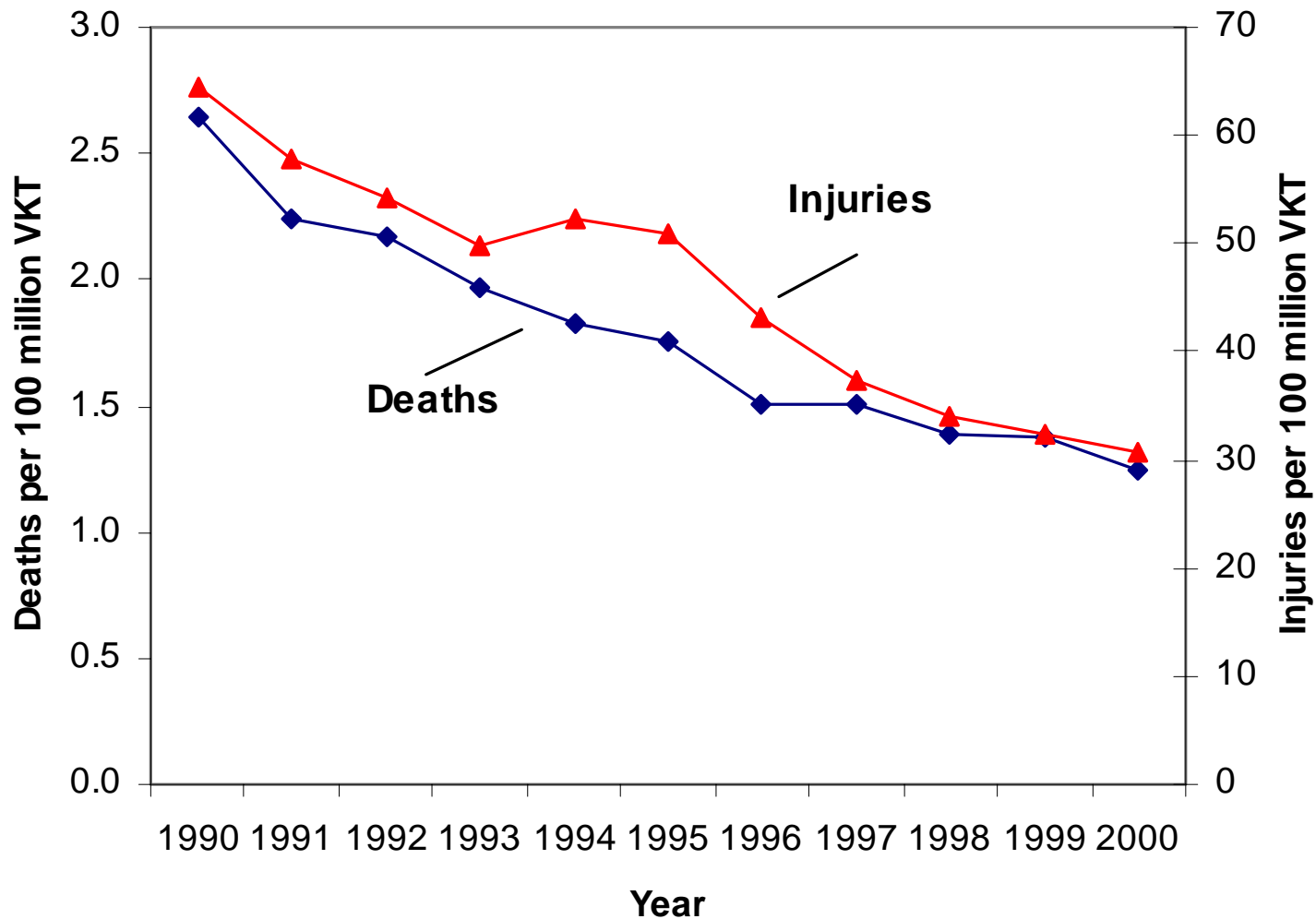
Safety outcomes were coming under control.

12 month Road Toll

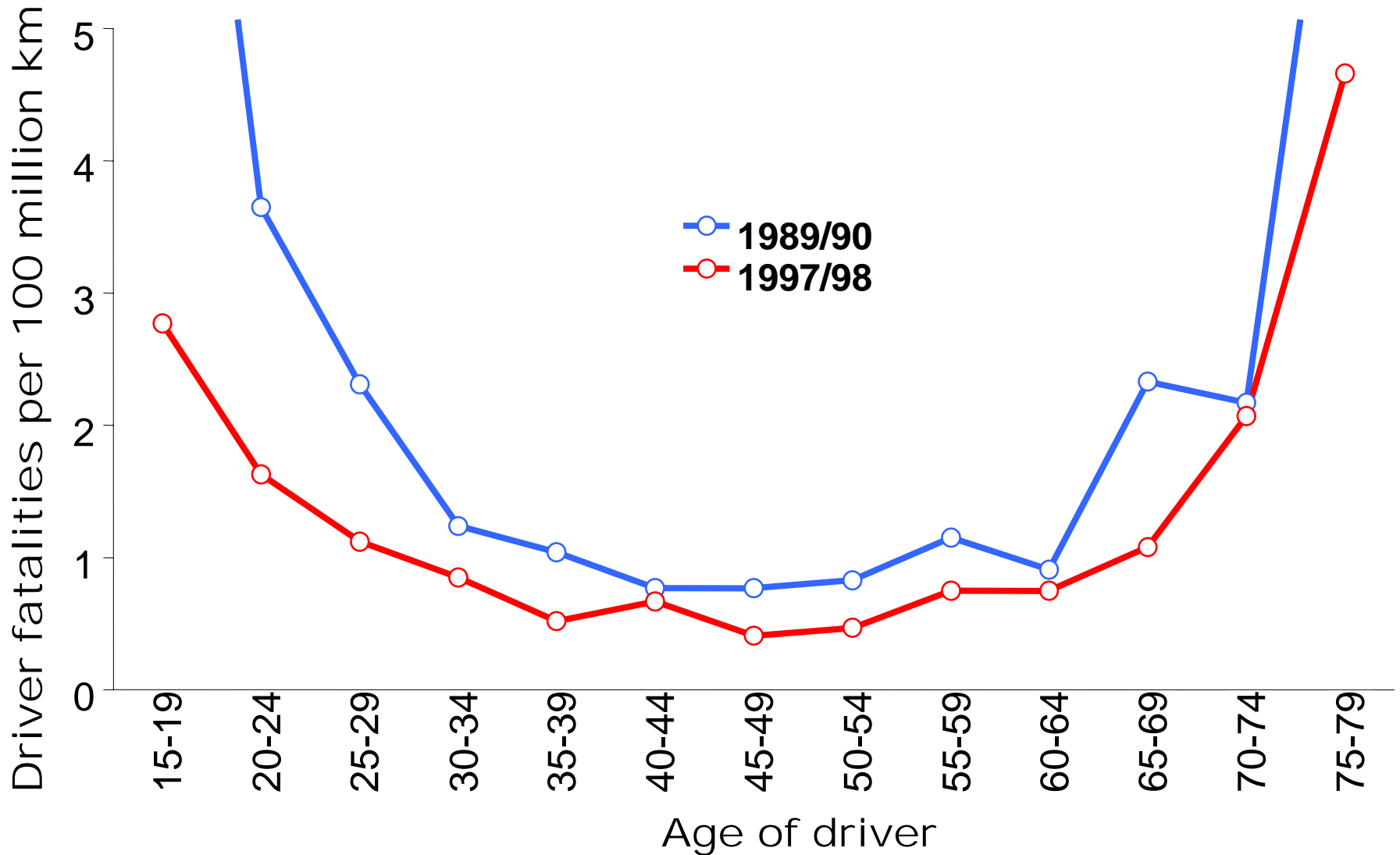
Weekly total for preceding 12 months



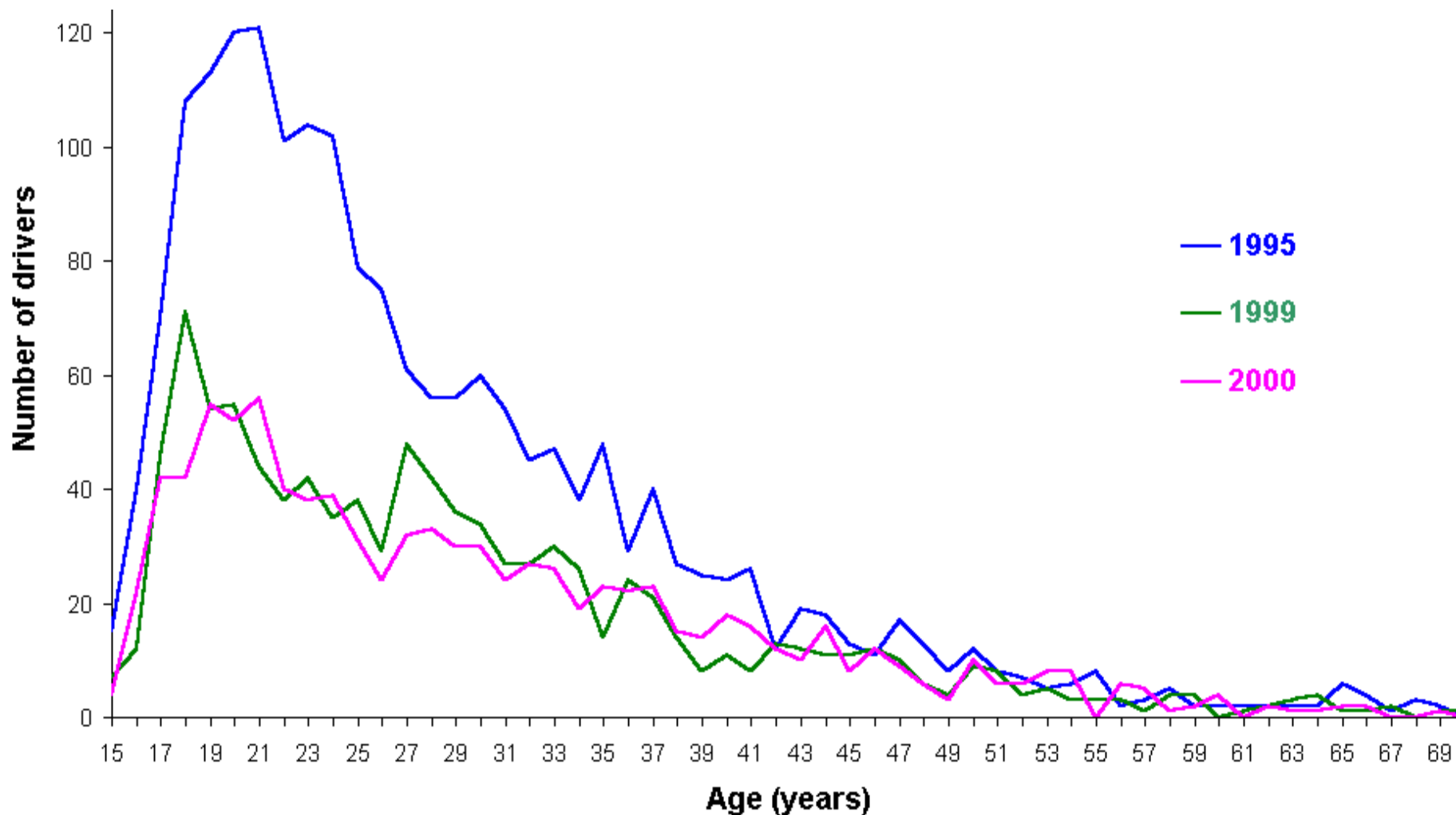
Deaths & injuries per 100 million vehicle kilometres travelled



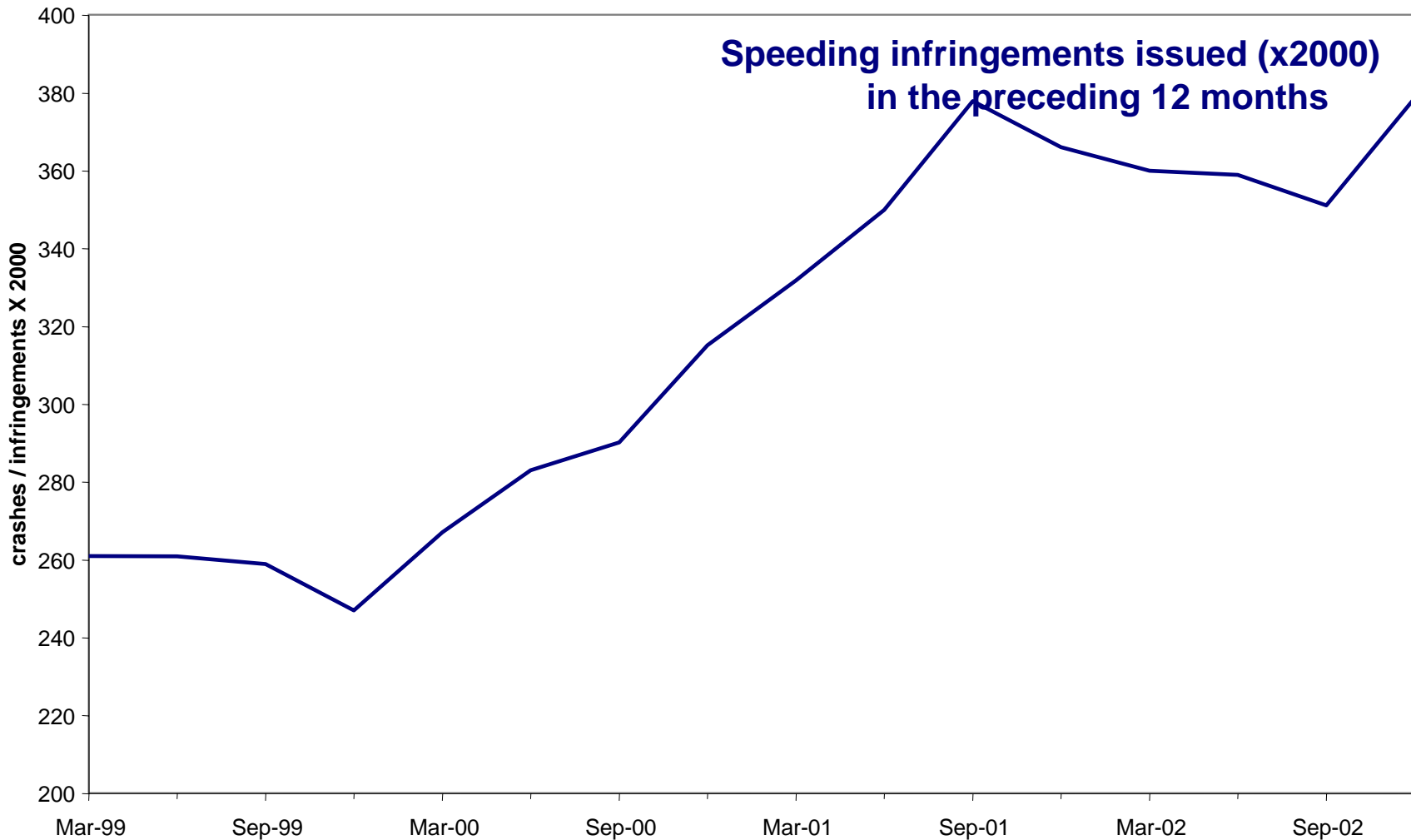
Crash risk by driver age group



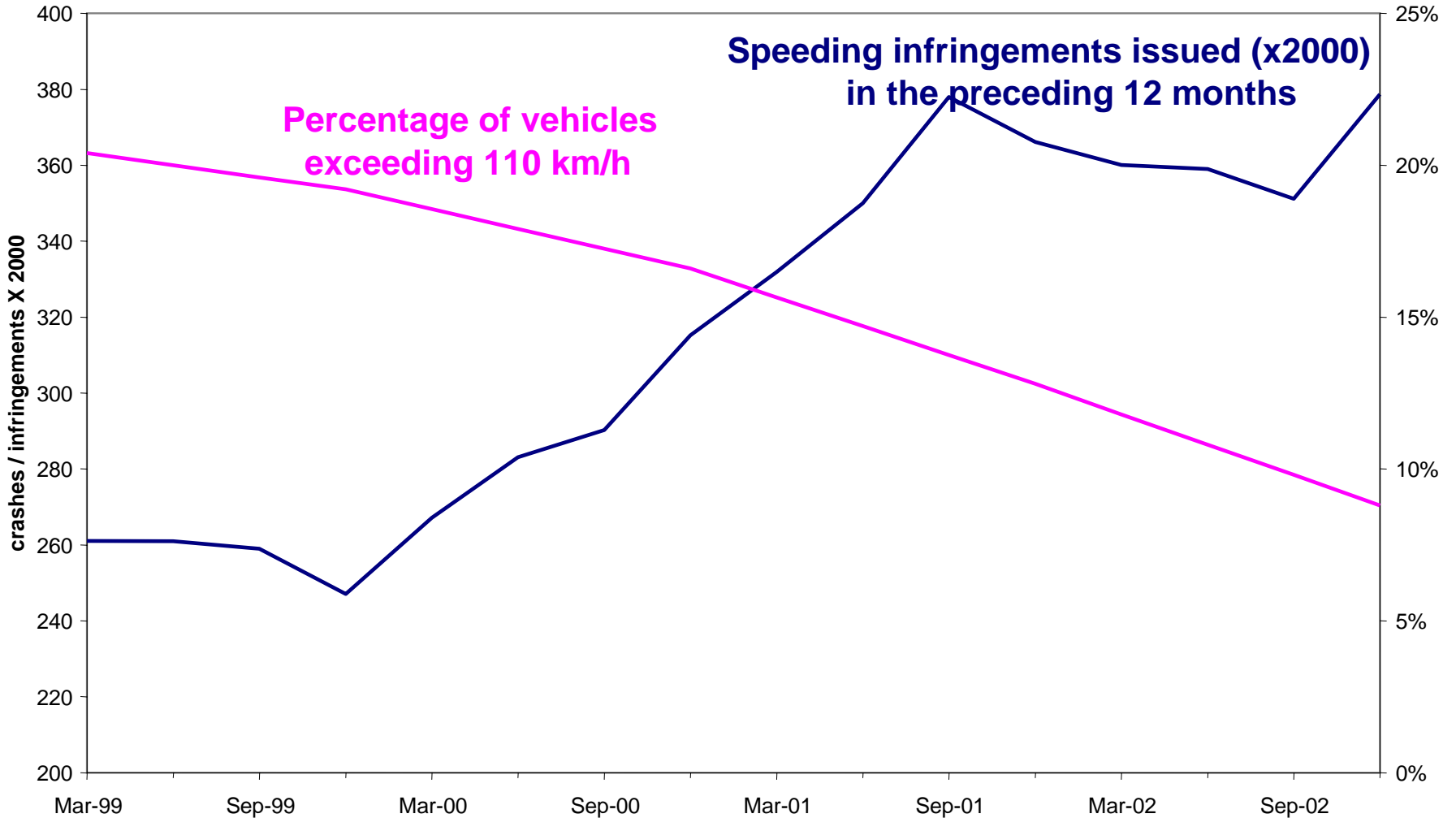
Male drunk drivers in crashes



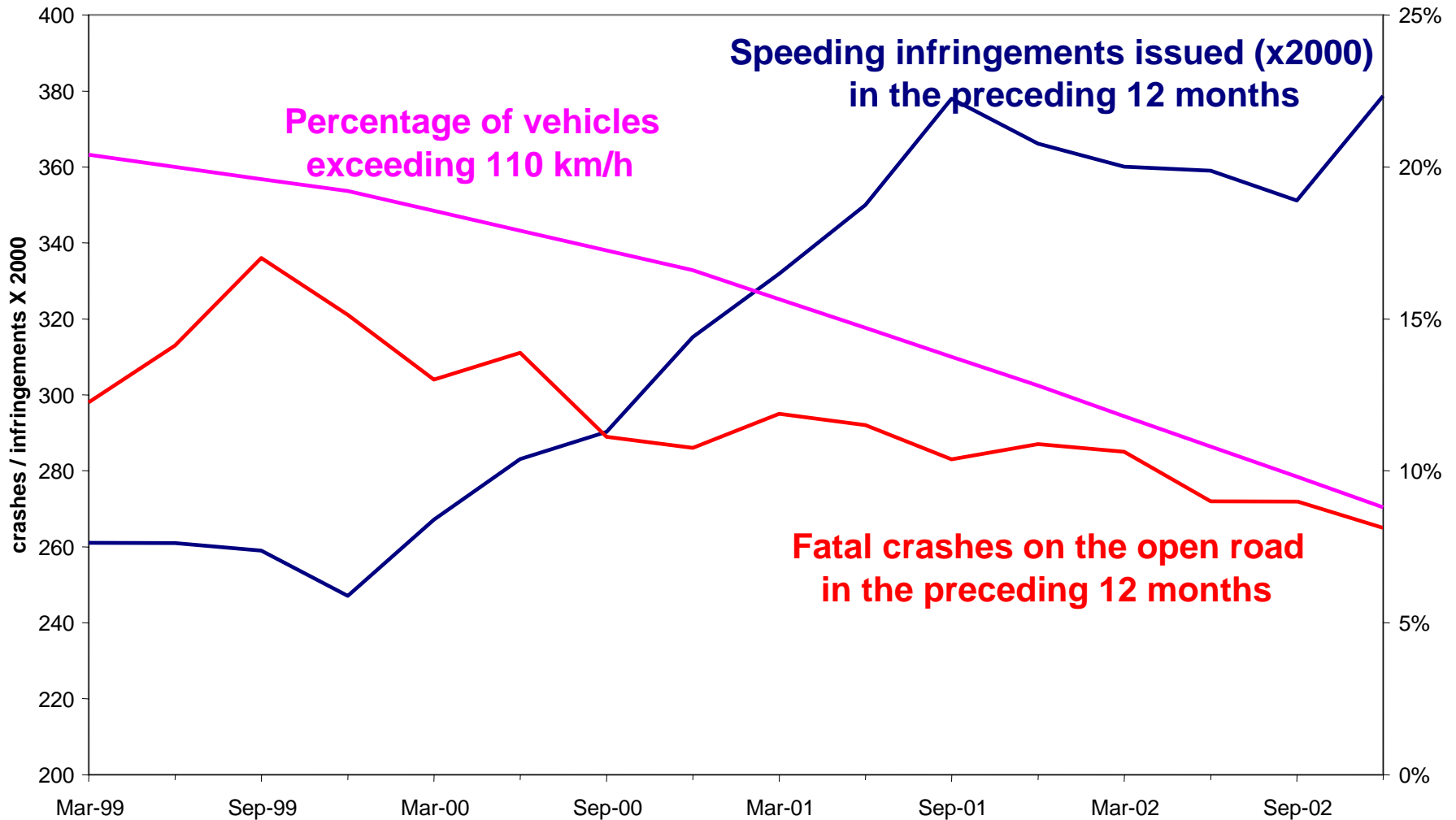
National Highway Patrol



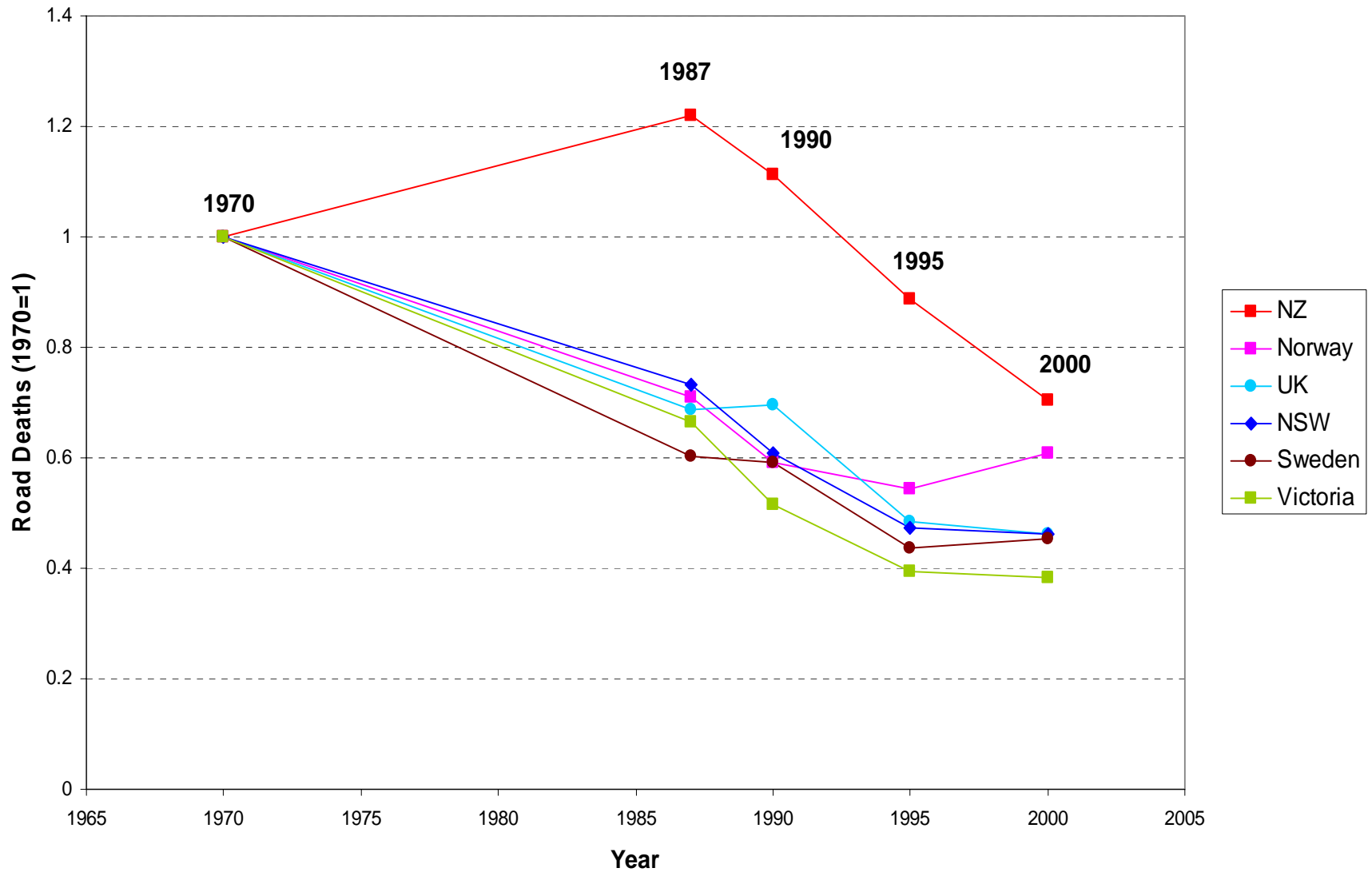
National Highway Patrol (cont'd)



National Highway Patrol (cont'd)



Deaths (1970 = 1)



Critical success factors

Lead agency role and agencies' accountability for results clearly defined.

Ambitious vision and targets.

High level coordination of multi-agency safety partnerships, with formal MOU between partner agencies to set out rules of engagement.

Integrated evidence-based interventions.

Critical success factors (cont'd)

Intensive social marketing targeted to support key enforcement interventions.

Devolution of safety interventions to local partners and stakeholders.

Sustainable funding sources and rigorous investment screening based on willingness to pay measures.

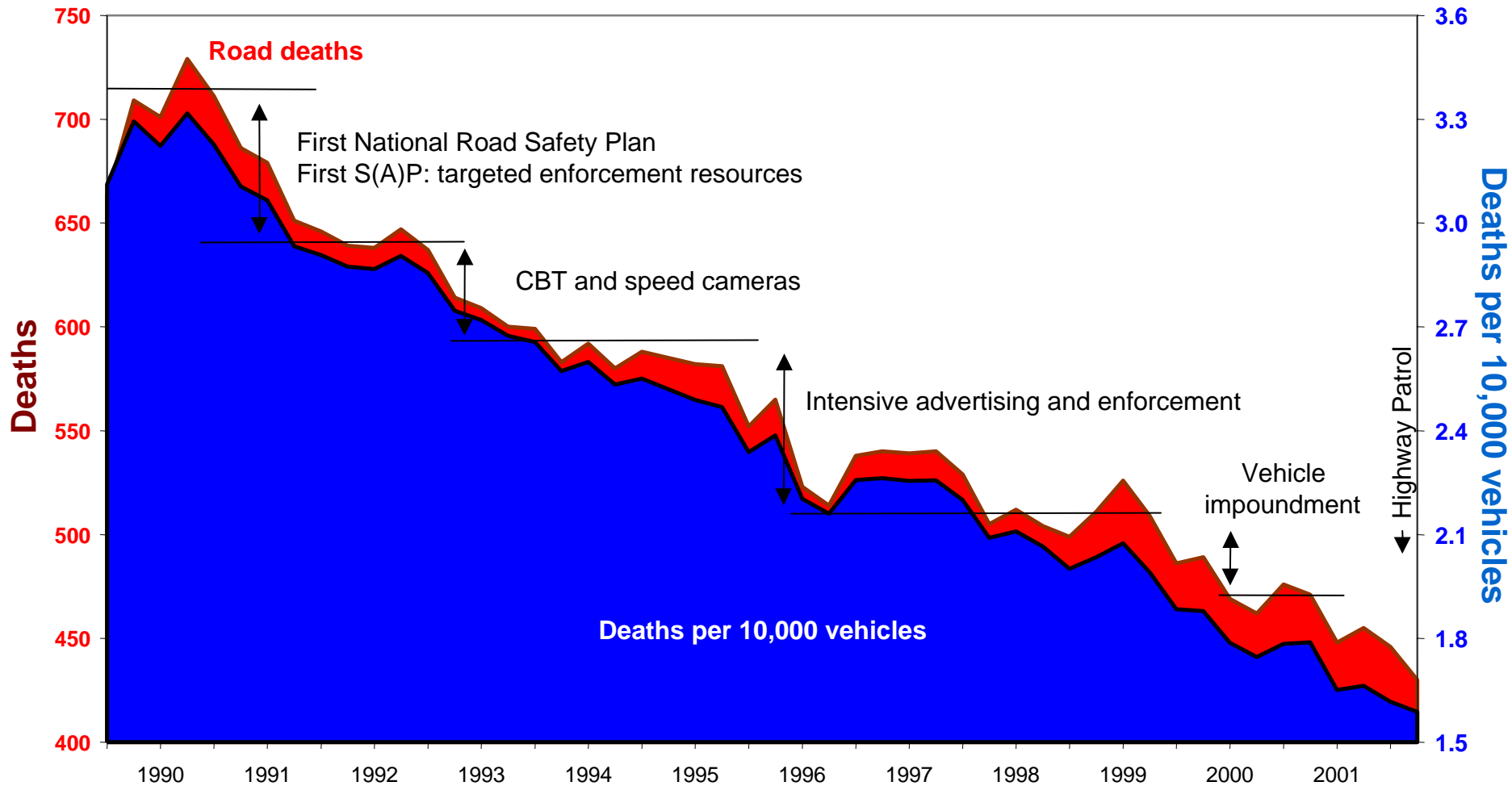
Critical success factors (cont'd)

Robust performance monitoring of safety interventions and results achieved.

Ex-post evaluation and peer review.

Introduction of new priority interventions to maintain momentum and build on performance gains.

New priority interventions



A systematic response

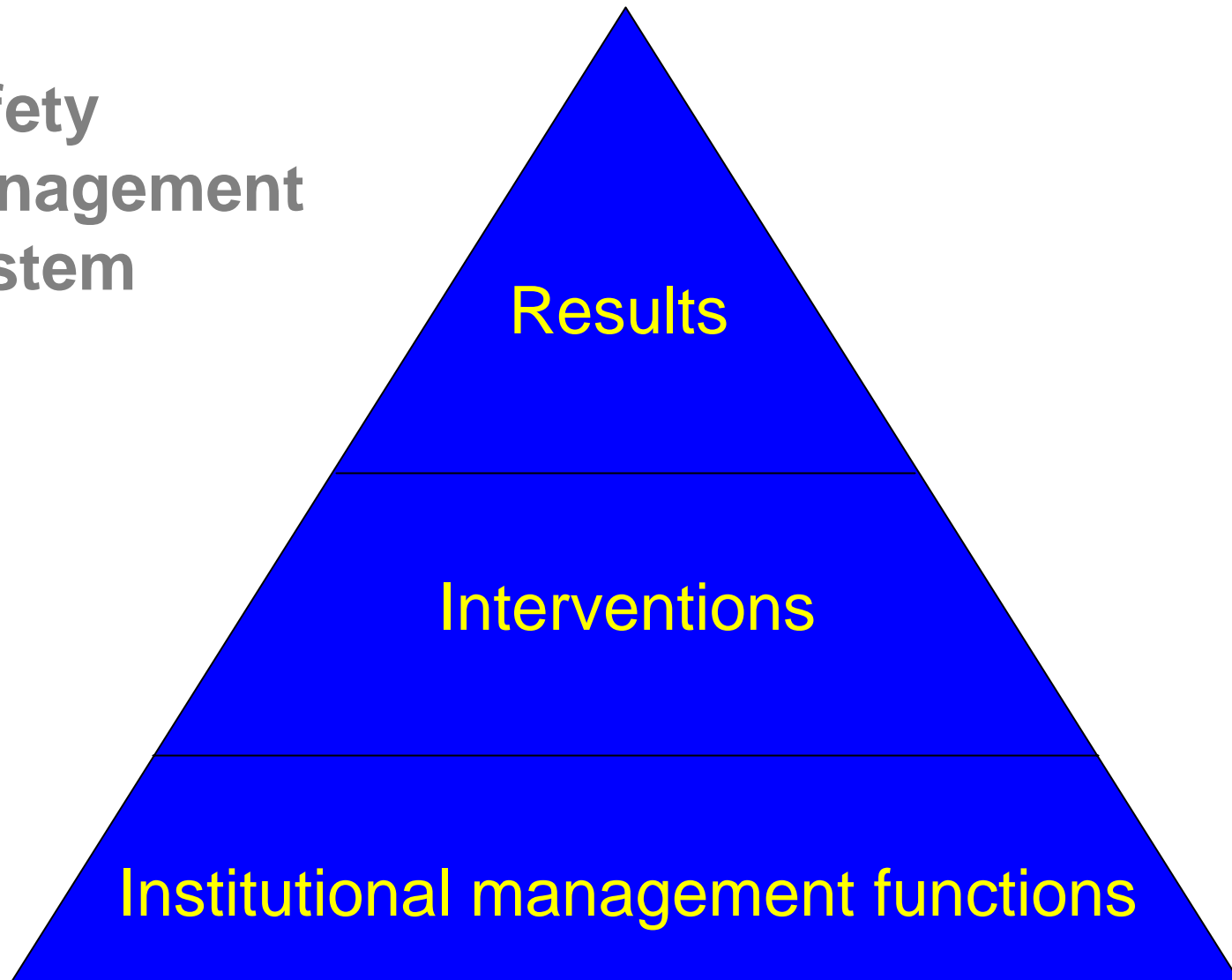
What we can observe in these two case studies is a systematic management response to the road safety risk factors in the jurisdictions concerned.

The road safety management system can be viewed in terms of three essential elements:

- *Institutional management functions*
- *Interventions*
- *Results*



Safety Management System



Source: *Institutional Arrangements for Road Safety Management, A Manual for Decision-Makers and Practitioners, The World Bank, Washington DC, (in preparation).*

Management functions

Seven vital institutional management functions can be identified:

- *Results focus*
- *Coordination*
- *Legislation*
- *Funding and resource allocation*
- *Promotion*
- *Monitoring and evaluation*
- *Research and knowledge transfer*



Results focus

What has been termed 'results focus' is the primary, overarching institutional management function.

This addresses the issue of leadership, strategy and 'ownership'. What are you trying to achieve? How are you going to get there? Who is responsible for this?

The other six functions contribute to the achievement of the desired results. How do you coordinate this? Legislate for this? Fund for this? And so on.



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Evolution of results focus

- 1950s** the road user.
- 1960 – 70s** systemic interventions – the ‘Haddon matrix’.
- 1980 – 90s** targeted national plans.
- 90s onwards** ‘safe system’ model.

From knowledge to action

It is important to recognize that a systematic response is dependent on the institutional capacity required to produce effective interventions.

In the absence of this institutional management capacity priority interventions are unlikely to succeed on a sustainable basis.

Hence the sequencing of investments to improve road safety results must be carefully considered.



Necessary steps

Assess country safety management capacity.

Prepare a long-term investment strategy to address revealed capacity weaknesses. This strategy should place a high priority on strengthening institutional management functions.

Identify projects and programs to implement the investment strategy.

World Bank initiatives

Development of country safety management capacity review tools to prepare investment strategies and identify projects.

Shift from '1st Generation' to '2nd Generation' road safety projects, to accelerate knowledge transfer, strengthen capacity and achieve quick results.

Engagement in international partnerships to support national road safety programs.

Thank you