Child and Youth Mortality Review Committee

Te Rōpū Arotake Auau Mate o te Hunga Tamariki, Taiohi

Seventh Report on the Activities of the Child and Youth Mortality Review Committee

2011–16

Foreword

Our young people are our future, and the avoidable deaths of children are particularly tragic and costly (in human and financial terms) to our society. Thus, the Health Quality & Safety Commission (the Commission) is pleased to release the *Seventh Report on the Activities of the Child and Youth Mortality Review Committee* (the CYMRC). The report highlights work undertaken by the CYMRC since the sixth activities report, which was published in 2012.

In the past five years, the CYMRC has produced five national annual data reports, and six special topic reports. The special topic reports have investigated the following factors in the deaths of children and young people: alcohol consumption; low speed run over; unintentional suffocation, foreign body inhalation and strangulation; unintentional deaths from poisoning; motorcycle, quad bike and motorised agricultural vehicle use; and mortality and morbidity of pertussis.

Of the six special reports, four have shown inequity in mortality rates for Māori children and young people, and those living with high deprivation. One report found no difference between Māori and non-Māori (alcohol involvement) and one showed Māori were less likely to die than non-Māori (motorcycle/quad bikes).

Inequity in child deaths is very concerning, and this work by the CYMRC is part of the Commission's committment to identifying and addressing inequity in New Zealand.

Reporting on special topics and developing recommendations involves extensive consultation with national experts and leaders that can influence system change. The CYMRC has engaged widely across all relevant sectors to identify key practical and workable recommendations, and to promote their implementation. The Commission's Board has welcomed the recommendations, and supports their implementation.

Congratulations to the CYMRC for achieving a great deal in the last five years. I am very grateful to the Chairs over this time – Dr Felicity Dumble and Dr Nick Baker – for their strong leadership.

I would like to join the current CYMRC Chair, Dr Dumble, in recognising the huge loss that parents, families and whānau experience with the death of a child or young person. There is still much to be done and it is imperative that we redouble our efforts to reduce further deaths.

The Commission looks forward to supporting the CYMRC as it continues to influence and lead systems improvement and change in the future.

Prof Alan Merry ONZM FRSNZ
Chair
Health Quality & Safety Commission

Chair's introduction

Welcome to the *Seventh Report on the Activities of the Child and Youth Mortality Review Committee* (the CYMRC).

The CYMRC has been working hard to reduce the number of children and young people who are tragically dying. I am delighted that these efforts, combined with the work of countless others, are paying off. The number of child and youth deaths dropped from 638 in 2002 to 488 in 2014, which is a remarkable achievement, especially in light of the substantial increase in New Zealand's population over the same period.

Much of the reduction in child and youth deaths is accounted for by reductions in sudden unexpected death in infancy (SUDI) and deaths due to road traffic crashes: SUDI dropped from 54 in 2010 to 35 in 2014; and transport deaths dropped from 114 in 2010 to 65 in 2014. The CYMRC has worked actively in these areas alongside many other stakeholders who have contributed to these positive results. There is much to celebrate but still much work to do.

Inequity in deaths of children and young people continues to be a challenge. The eleventh data report (2015) showed that, overall for the period 2010–14, mortality rates in tamariki and rangatahi Māori were double those for European and others. There was also a pattern of higher mortality rates with increasing deprivation. Those living in the least deprived areas (deciles 1 and 2) had statistically significantly lower mortality rates than those living in the most deprived areas (deciles 7–10). Of note, those living in decile 10 areas had a mortality rate nearly three times higher than those living in decile 1 areas.

The CYMRC is committed to reducing inequity. Future data reports will have separate chapters relating to Māori and Pacific children and young people, and a special topic Māori report is planned for 2018–19. This will be a joint report with the mortality review committees' Māori Caucus.

I would like to acknowledge the fantastic work of the CYMRC members, and the Secretariat at the Commission, for their expertise and commitment. I would also like to acknowledge the local coordinators and chairs throughout the country, and all of those involved in the local child and youth mortality review groups. Reviewing cases is not an easy task and the CYMRC values your expertise and passion for this work.

In particular, my heart goes out to the parents, families and whānau that have experienced the tragic loss of their child or young person. I hope our combined efforts will contribute to fewer children and young people being taken too soon.

Dr Felicity Dumble
Chair
Child and Youth Mortality Review Committee

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1. Introduction

This seventh activities report presents the activities of the Child and Youth Mortality Review Committee (CYMRC) from 1 July 2011 to 30 June 2016. It follows on from *The Sixth Report on the Activities of the Child and Youth Mortality Review Committee, 1 January 2010 to 30 June 2011*, published in March 2012.[1]

Section 2 of this report gives the broad context of the CYMRC's work.

Section 3 describes the status of child and youth mortality in New Zealand and provides the more specific context for the CYMRC's activities.

Section 4 begins by outlining the CYMRC's national work, including its national reports and recommendations, and the quality improvement work to create an efficient and effective system. It then describes the local work the CYMRC coordinators do. The report concludes with a brief overview of the CYMRC work underway and planned (section 5).

2. Background

The CYMRC's role is to identify, address and reduce the number of deaths of infants, children and young people in New Zealand. Established under the New Zealand Public Health and Disability Act 2000, the CYMRC is an independent committee reporting directly to the Health Quality & Safety Commission (the Commission), and one of four permanent mortality review committees.[2] For a list of CYMRC members who have served during the period this report covers, see Appendix 2.

The CYMRC is required, under the legislation and its terms of reference, to:

- review and report to the Commission on deaths that are within the CYMRC's scope, with the aim of reducing deaths and supporting continuous quality improvement by promoting ongoing quality assurance programmes
- advise on any other matter related to mortality that the Commission specifies in writing
- develop strategic plans and methodologies that are designed to reduce morbidity and mortality in areas relevant to the CYMRC's functions.

[1] Health Quality & Safety Commission. 2012. *The Sixth Report on the Activities of the Child & Youth Mortality Committee – 1 January 2010 to 30 June 2011.* URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/382 (accessed 3 November 2016).

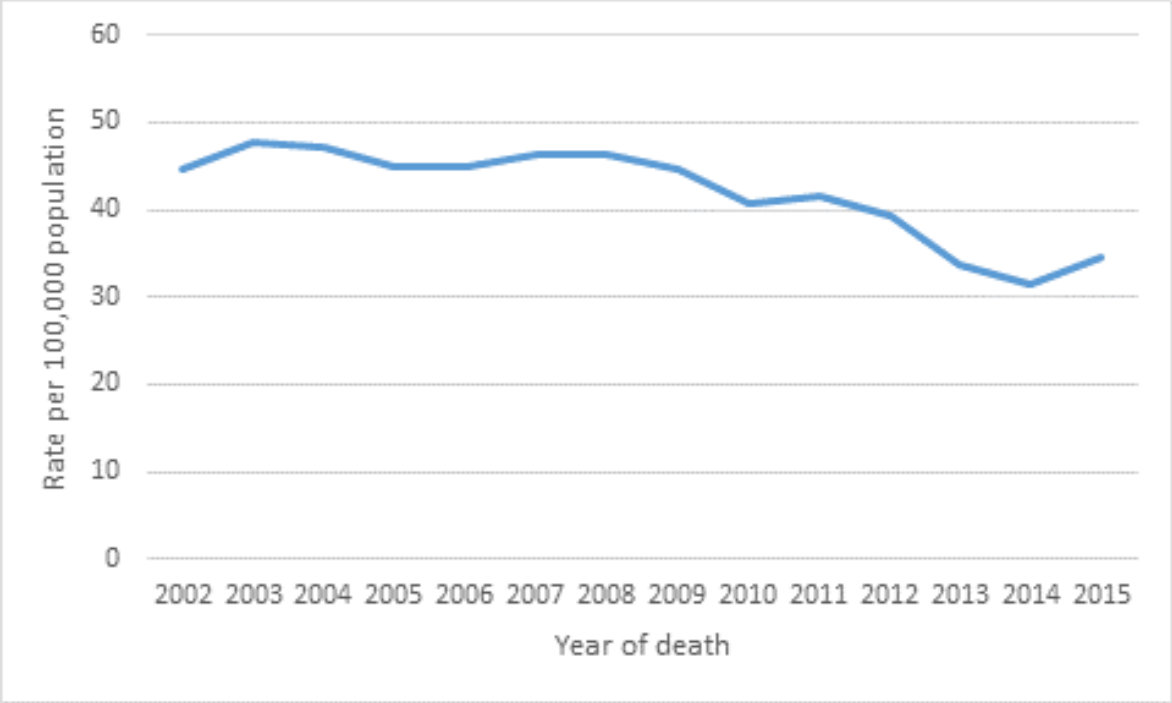
[2] www.hqsc.govt.nz/our-programmes/mrc

3. Reducing child and youth mortality: How are we doing?

Outcomes

The number of deaths of children and young people continues to decline. In its recent report, *Open4Results*, the Commission shows the number of children and young people who died each year fell between 2010 and 2014.[3] Figure 1 gives an overview of the rates of child and youth deaths from 2002 to 2015. In number terms, child and youth deaths dropped from 638 in 2002 to 488 in 2014.

Figure 1: Mortality rates of children and young people, New Zealand, 2002–15



Open4Results also details the financial saving to the New Zealand economy through the activities of the CYMRC and its stakeholders. The value of avoiding these early deaths is an estimated $175 million.[4]

Two of the main reasons for the reduction in child and youth deaths are that the number of cases of sudden unexpected death in infancy (SUDI) and the number of deaths due to road traffic crashes have fallen. SUDI dropped from 54 in 2010 to 35 in 2014; and transport deaths from 114 to 65 in the same period. The CYMRC has worked actively in these areas alongside many other stakeholders who have contributed to these positive results.

[3] Health Quality & Safety Commission. 2016. *Open4Results*. Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/assets/Health-Quality-Evaluation/PR/Open4Results-Oct-2016.pdf (accessed 3 November 2016).

[4] See note 2.

The CYMRC helped to achieve these improved outcomes in the following ways.

- It recommended putting babies to sleep on their backs, and also emphasised the need for safe sleep spaces for babies. Both these practices have been instrumental in reducing SUDI.
- It recommended raising the driving age and introducing graduated licences and a zero-alcohol policy for drivers under 20 years of age, and actively contributed to the policy development around these changes. For adolescents, the largest reductions in deaths have come from fewer road traffic crashes.

The CYMRC has also focused on other causes of child and youth deaths in special topic reports (see 'Reports and recommendations' in section 4).

Some quality improvement initiatives at national and local levels over the reporting period have included:

- co-opting local coordinators for steering groups and advisory groups in SUDI prevention and Safe Sleep programmes
- contributing to inter-agency working groups for the district health board (DHB) Suicide Prevention Postvention Plan
- incorporating Safe Sleep resources from the CYMRC's March 2013 special report on unintentional suffocation, foreign body inhalation and strangulation into Northern Regional Safe Sleep Policy and South Island Safe Sleep Policy Audit tool
- Coronial Services providing immediate notification of suicides consistent with the Suicide Prevention Postvention Plan.

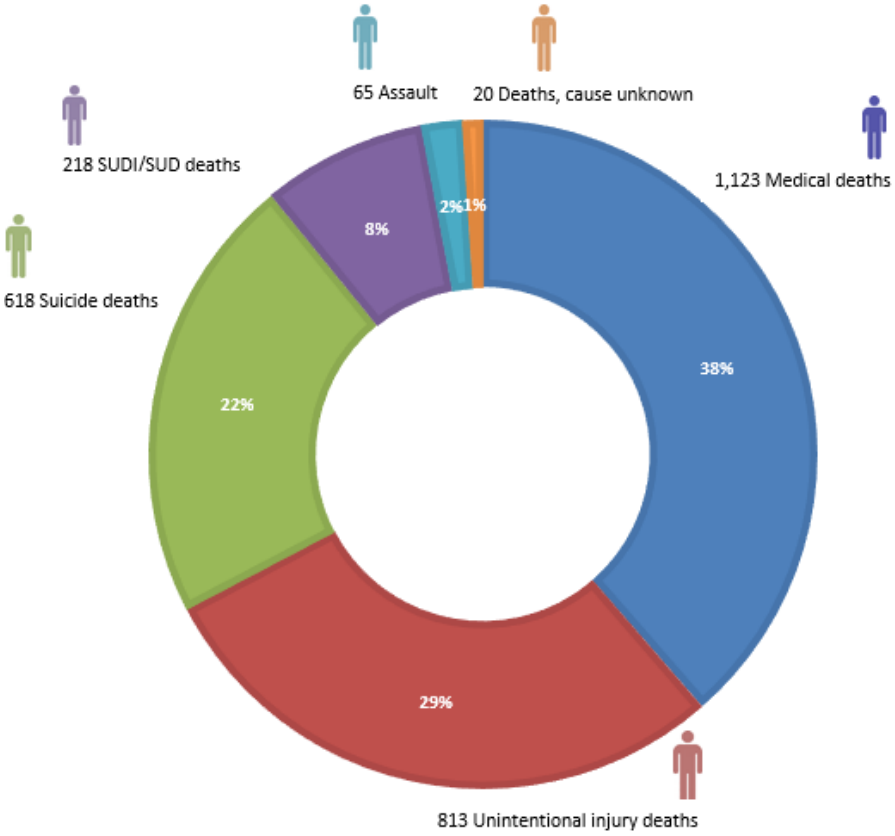
The CYMRC is also developing its partnership approach with the Māori Caucus (see section 5).

The eleventh data report[5] presents the most recent CYMRC mortality data from 2010 to 2014 (see Appendix 1 for a summary). Figure 2 shows how much each cause of death contributed to the total number of deaths of children and young people over this period.

The twelfth data report with updated data is due for release in February 2017.

[5] New Zealand Mortality Review Data Group.2015. *Child and Youth Mortality Review Committee 11th Data Report 2010–2014.* Wellington: Child and Youth Mortality Review Committee. URL: www.hqsc.govt.nz/assets/CYMRC/Publications/eleventh-data-report-2010-2014.pdf (accessed 12 January 2017).

Figure 2: Cause of death for children and young people in New Zealand, 2010–14



Source: New Zealand Mortality Review Data Group. 2015. *Child and Youth Mortality Review Committee 11th Data Report 2010–2014.*

The percentages in Figure 2 relate to the following data.

- The 1123 medical deaths (291 under one year of age) were related to diseases, mental and behavioural disorders, the perinatal period and pregnancy, and congenital abnormalities.
- The 813 deaths due to unintentional injury (265 aged 20–24 years) include accidents (most were transport-related injuries) and complications of medical and surgical care.
- Intentional injuries from assault accounted for 65 deaths.
- Intentional injuries from suicide accounted for 618 deaths.
- Most of the 218 SUDI/SUD deaths (209 aged under one year) were due to accidental suffocation and strangulation in bed, and sudden infant death syndrome (cause of death unknown).
- For 20 deaths, the cause was unknown due to missing data.

Inequity

The CYMRC's special reports have shown inequity in mortality rates for Māori children and young people, and those living with high socioeconomic deprivation. Of the six special reports, four demonstrated inequity that negatively impacted Māori children. One report (alcohol involvement – below) showed no statistically significant differences by ethnicity and one (motorcycle and quad bikes) showed Māori were less likely to die than non-Māori from the causes it focused on.

The low speed run over mortality report (August 2011)[6] noted that 48 percent of deaths occurred in Māori whānau and 26 percent in Pacific families. The report emphasised the links between these deaths and socioeconomic factors and neighbourhood deprivation. More Māori deceased children were living in lower-decile neighbourhoods at the time of death. In homes with higher levels of deprivation, children were living in more crowded situations, with fewer safe play spaces, and families were more likely to live in a rental property.

The deaths related to alcohol involvement report (September 2011)[7] for the years 2005–07 found no significant differences in the prevalence of drinking alcohol in the past 12 months between Māori and non-Māori when adjusted for age.

The unintentional suffocation, foreign body inhalation and strangulation report (March 2013)[8] on deaths from 2002 to 2009 found the mortality from suffocation and strangulation in bed was significantly higher for Māori and Pacific children and young people than for their European counterparts.

The unintentional deaths from poisoning in young people report (August 2013)[9] from 2002 to 2008 showed the rate of death for Māori was 4.68 per 100,000, whereas for non-Māori it was 1.52 per 100,000. Broken down by substance group, mortality from hydrocarbon gas poisonings was significantly higher for young Māori aged 15–24 years than for non-Māori, as were poisoning deaths from alcohol. The leading cause of death for Māori was hydrocarbon gases; the leading cause of death for non-Māori was opioids.

The motorcycle, quad bike and motorised agricultural vehicle use report (December 2014)[10] showed Māori children and young people were significantly less likely to die in this category than Europeans. The overall mortality rate for Māori who died from using off-road vehicles (0.27 per

[6] Child and Youth Mortality Review Committee. 2011. *Low Speed Run Over Mortality*. Wellington: Child and Youth Mortality Review Committee. URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/5 (accessed 3 November 2016).

[7] 'Involvement' includes deaths related to: the deceased being affected by alcohol; the person responsible for the death affected by alcohol; or patterns of alcohol consumption related to the death.

[8] Child and Youth Mortality Review Committee. 2013. *Special Report: Unintentional suffocation, foreign body inhalation and strangulation.* Wellington: Child and Youth Mortality Review Committee. URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/805 (accessed 3 November 2016).

[9] Child and Youth Mortality Review Committee. 2013. *Special Report: Unintentional deaths from poisoning in young people*. Wellington: Child and Youth Mortality Review Committee. URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/1068 (accessed 3 November 2016).

[10] Child and Youth Mortality Review Committee. 2014. *Special Report: Child and youth mortality from motorcycle, quad bike and motorised agricultural vehicle use.* Wellington: Child and Youth Mortality Review Committee. URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/1928 (accessed 3 November 2016).

100,000) was half the rate of New Zealand European/Other European children and young people (0.54 per 100,000).

The pertussis in children and young people in New Zealand report (December 2015)[11] found Māori and Pacific infants were over-represented in pertussis hospitalisations and mortality. Part of the reason for the higher hospitalisation rates among Māori and Pacific infants aged under six months was the inequities at the time in pertussis immunisation coverage for Māori and Pacific infants. Overall, immunisation coverage has improved for Māori and Pacific infants aged eight months and two years from 78 percent for Māori (and 86 percent overall) in 2009–10 to 90 percent and 91 percent for Māori (and 93 percent and 94 percent overall) in 2015.[12]

The eleventh data report (2015) showed that, overall for the period 2010–14, mortality rates in Māori children and young people (60 deaths per 100,000 resident population) were double those of Europeans and others (30 deaths per 100,000). Mortality rates increased with greater socioeconomic deprivation: for those living in deciles 1 and 2 (least deprived), mortality rates were statistically significantly lower than for those living in deciles 7–10 (most deprived). Of note is that those in decile 10 had a mortality rate nearly three times higher than those in decile 1. For all age groups in this report, Māori had higher mortality rates than non-Māori.

4. Activities

CYMRC national activities

From 1 July 2011 to 30 June 2016, the CYMRC's national work has included writing reports and recommendations, work towards getting these recommendations implemented, other communications work (for example, website and presentations), and supporting and improving local review processes.

At a national level, the CYMRC has an overview of child and youth mortality data and it develops national reports, including annual data reports, and special topic reports with recommendations for national policy and practice change. National work focuses on influencing stakeholders through the engagement process and by developing and reviewing recommendations.

Reports and recommendations

The CYMRC produces three different types of national reports:

1. activities reports
2. national data reports, annually
3. special topic reports.

[11] Child and Youth Mortality Review Committee. 2015. *Special Report: Mortality and morbidity of pertussis in children and young people in New Zealand*. Wellington: Child and Youth Mortality Review Committee. URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/2387 (accessed 3 November 2016).

[12] Ministry of Health. 2016. *Health targets: Increased immunisation*. Wellington: Ministry of Health. URL: www.health.govt.nz/new-zealand-health-system/health-targets/about-health-targets/health-targets-increased-immunisation (accessed 24 January 2017).

Each activities report updates the work and accomplishments of the CYMRC and the Commission since the last report was produced, including the extent to which the recommendations have been implemented. This seventh activities report highlights work the CYMRC has done since the publication of the sixth activities report in 2011.

The CYMRC produces an annual data report with an overview of mortality data for children and young people aged 28 days to 24 years over the preceding four years. Since July 2011, the CYMRC has completed the following five national data reports.

1. National data overview 2011 (data 2006–10)
2. National data overview 2012 (data 2007–11)
3. Ninth data report (data 2008–12)
4. Tenth data report (data 2009-13)
5. Eleventh data report (data 2010-14).

The twelfth data report (2011–15) is due to be released in February 2017.

Special topic reports began with CYMRC's *Fifth Report to the Minister of Health* in 2009.[13] The CYMRC then created the following six detailed reports that analysed specific categories of death in the period from 1 July 2011 through to 30 June 2016.

1. *Low speed run over mortality* (August 2011)
2. *The involvement of alcohol consumption in the deaths of children and young people in New Zealand during the years 2005–2007* (September 2011)
3. *Unintentional suffocation, foreign body inhalation and strangulation* (March 2013)
4. *Unintentional deaths from poisoning in young people* (August 2013)
5. *Child and youth mortality from motorcycle, quad bike and motorised agricultural vehicle use* (December 2014)
6. *Mortality and morbidity of pertussis in children and young people in New Zealand* (December 2015).

Before 2011, the data reports included general recommendations for local and national changes based on local death reviews. From 2011 on, the special topic reports conducted more focused analyses, included targeted recommendations on the specific issue under review.

Developing special topic reports and recommendations involves considerable consultation with national experts and leaders who can influence change. Consultation and collaborative development are essential for stakeholders to share ownership of recommendations and share an understanding of the need for change, as well as for motivating them to implement the recommendations.

From 1 July 2011 to 30 June 2016, the CYMRC made 112 recommendations across six special topic reports. To monitor the progress towards implementing the recommendations, the CYMRC and the Commission use a broad assessment scale of four categories for rating the extent to which recommendations have been achieved. These categories are: achieved; mostly achieved (half or more actions with the recommendation were achieved); partially achieved (up to half

[13] Child and Youth Mortality Review Committee. 2009. *Fifth Report to the Minister of Health: Reporting mortality 2002–2008*. Wellington: Child and Youth Mortality Review Committee. URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/11 (accessed 3 November 2016).

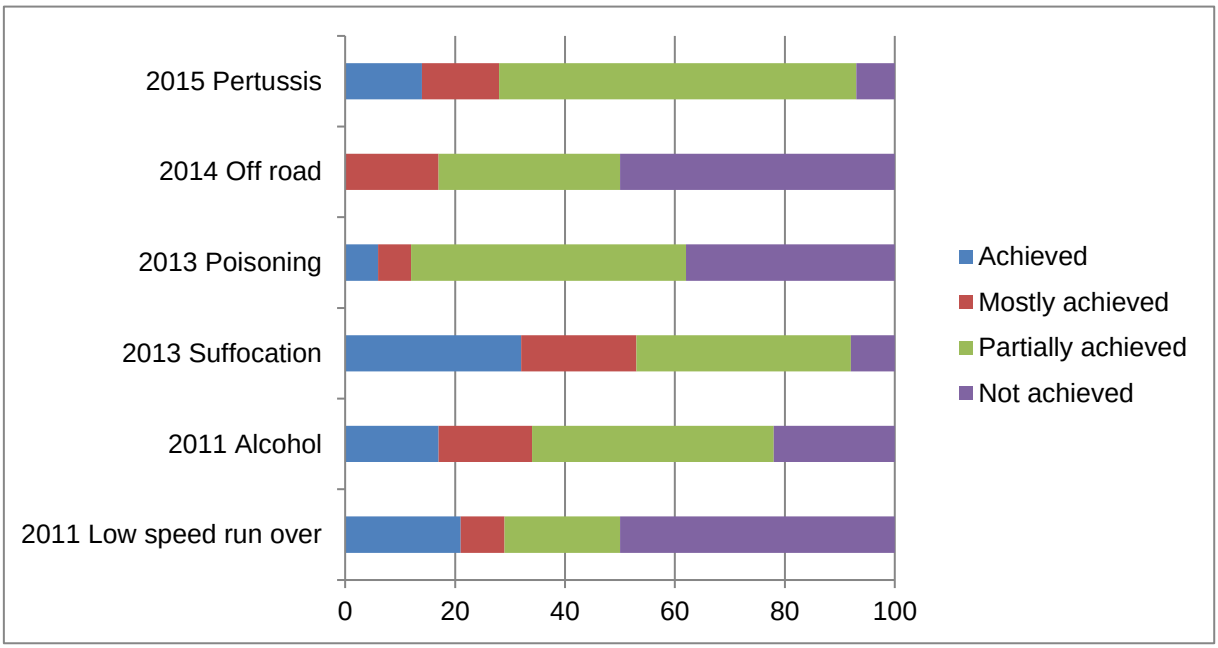
achieved); and not achieved (no progress made). With this process, it is possible to identify improvement over time.

The 112 recommendations fell into the four categories as follows:

- 19 percent (*n* = 21) were achieved
- 15 percent (*n* = 17) were mostly achieved
- 42 percent (*n* = 47) were partially achieved
- 24 percent (*n* = 27) were not achieved.

Figure 3 provides an overview of the progress in implementing these recommendations, by each special topic report. For a more detailed update, see Appendix 4.

Figure 3: Implementation of recommendations by CYMRC special topic report, 2011–15



Attributes of recommendations that are more likely to be implemented[14]

The CYMRC strives to create recommendations that are targeted and useful to the agencies they apply to. Successful recommendations typically have a precise, actionable component and an agency or organisation that is motivated and able to follow through on achieving the recommendation.

Environmental change is critical for persistent, long-term success. Recommendations that advocate for behaviour change alone are weak and likely to be ineffective; targeting environmental change brings broader, more sustainable benefits.

[14] N Baker and B Griffin. 2015. *Recommendations and actions – attributes most associated with system improvement.* APAC Conference.

In some cases multiple sectors must act collaboratively on a recommendation in order for it to be implemented. For example, in the areas of low speed run over, poisoning and youth suicide, no one sector influences all of the contributing factors.

Recommendations that aim to reduce inequity or address issues related to vulnerable children typically require influence across many sectors to achieve change. Effort is therefore needed to build and reinforce collaborative work. This approach is most effective if driven by clear and consistent information and shared values. Targeted and sustained attempts at influence, over time, can create an environment that supports positive change.

A lot can be learnt from the recommendations that have been implemented and those that have not. The following are traits of successful recommendations and traits of recommendations that have had no impact, as noted in previous CYMRC reports.

Recommendations that are **successfully implemented**:

- clearly identify the problem and address a single body that must develop a response; this includes recommendations for the CYMRC itself to act on
- offer solutions that a single body can clearly implement
- include a set of actions for several organisations to implement simultaneously
- are framed to appeal to values that everyone in the intended audience shares
- are directed to strong allies that can work within an existing 'machine'
- have the support of allies cultivated through effective networking
- are aligned with current government programmes
- have been developed collaboratively
- support recommendations others have already made
- are timely – for example, by aligning with a current government agenda
- target environmental change so change is long-lasting and sustainable.

Recommendations that **fail to be implemented**:

- are vague, stating 'this needs to/should happen' without a clear action to support change; they only offer general principles and values that everyone will agree with
- contain statements of fact rather than recommendations for action
- include good ideas, but may not be practical
- present solutions without clearly defining the problem
- have no clear target agency or group that can or will work to implement them
- advocate for short-term behaviour change without environmental change
- are outside the scope of the organisation(s) responsible for implementing them
- were not developed in collaboration with the organisation(s) responsible.

Applying the above learnings is the first step towards making carefully and critically developed recommendations that are realistic, actionable and measurable. This is an ongoing focus of work for the CYMRC and will hopefully see more recommendations being implemented, resulting in systems change and ultimately saving lives.

Communications work

The CYMRC has an active web presence,[15] which the Commission supports and manages.

The following are a selection of some of the presentations and articles, produced since July 2011, that have included CYMRC data.

1. *Framework that links data to preventive actions*, Australasian Mortality Data Interest Group, annual workshop, 2011
2. *Context and circumstances of unintentional suffocation in place of sleep in New Zealand*, International Conference on Stillbirth, SIDS, and Infant Survival, 2012
3. George Abbott Symposium, 2012
4. Presentation at national coroners' meeting, 2012
5. *SUDI prevention in NZ: Cause of death coding and stakeholder engagement*, NZ College of Public Health Medicine ASM, 2012
6. *Child and youth mortality review,* national DHB child and youth health workshop, 2013
7. *Poison kills: An overview of unintentional poisoning deaths in NZ children and young people*, Paediatric Society of NZ ASM – poster, 2013
8. *Rangatahi huffing to an early grave*, Waatea News, 2013
9. *Death of young people by unintentional poisoning 2002–2008*, 2013
10. *Unintentional injury deaths that occur in NZ infants and toddlers*, Plunket Conference, 2014
11. *Measuring that which is important, but difficult to measure*, Public Health Association conference, 2015
12. *Forecasting the future,* NZ College of Public Health Medicine ASM, 2015
13. *Off road vehicle and child youth deaths*, Quad Bike Forum, 2015
14. *Learning from the past to prevent avoidable loss in the future*, Waikato Paediatrics, 2015
15. *Recommendations and actions – attributes most associated with system improvement* (Highly commended – poster), APAC Forum, 2015
16. *Pertussis Report*, New Zealand College of Public Health Medicine Annual Scientific Meeting, 2016
17. *Pertussis Report*, national conference for general practice, 2016
18. *Mortality trends in NZ children and young people*, 2010–2014. Cook Islands Health Conference, 2016
19. *Processes for monitoring mortality in NZ, their interoperability and potential gaps through which cases can be lost*, Australasian Vital Statistics Interest Group annual meeting, 2016
20. Presentations of data at the annual Ministry of Health Mortality Forum
21. Numerous media releases around publication of reports and conferences.

[15] www.hqsc.govt.nz/our-programmes/mrc/cymrc

Review of the CYMRC system – CYMRC Local Review Project

The CYMRC began a Local Review Project in 2015 to help its local review system continue to operate effectively and efficiently. Some of the key findings and recommendations from the review were that it is necessary to:

- prioritise the types of death for review
- have the appropriate agents around the review table so organisations can make the recommended changes
- clarify roles and provide support, including training and education, to improve effectiveness of local coordinators, chairs, agents and review groups involved
- establish a core data set
- provide central guidance on standard review practice.

The project found that, under the current model of the review system, practices vary widely in terms of collecting information on deaths and reviewing deaths; the engagement and capability of local groups are also variable. The project identified a range of opportunities for improving quality, including by:

- improving data collection, access and recording
- addressing identified barriers to local review
- creating the position of the coordinator within DHBs
- improving effectiveness of local groups
- reviewing funding.

Some of the actions taken since the review have been to:

- draft a quality improvement plan
- increase staff support for changes at local and national levels
- establish a core data set to improve analysis
- develop a clear review policy statement (see below).

As a result of the review of the local child and youth mortality review group (LCYMRG) networks (and the resulting CYMRC Review Policy), DHBs have a new contract expectation for the period of June 2016 to June 2017. The review showed that CYMRC direction, criteria for reviews, and targets were not clear enough, leading to variable practice at a local level. The CYMRC has specified that it expects DHBs to review at least 70 percent of death cases, and related data.

CYMRC Review Policy

Over the last few years, the CYMRC has been working to make its local review system more efficient and effective, and to clarify its expectations of those involved. This work highlighted the need for the CYMRC to make a clear, national policy statement to provide guidance and direction for those contributing to the CYMRC network system.

The result has been the CYMRC Review Policy, which sets out the CYMRC's model of operating and change theory, as well as specifying expectations of the parties involved in its work. The policy is relevant to all parties working with the CYMRC, and in particular to the agents and organisations involved in local reviews or in shaping useful recommendations at a national level.

For an online version of the full policy, see the Commission's website.[16] To fulfil its functions, the CYMRC has also reviewed and adopted a theory of change based on parallel national and local information collection and review processes. In the CYMRC model, the system changes when:

- the organisation that helped shape useful national recommendations with the CYMRC takes those recommendations forward
- agents implement local recommendations, taking learnings from local review to inform their local practice.

CYMRC local activities

This section outlines the work of the LCYMRGs, under the auspices of the national CYMRC. LCYMRGs are made up of CYMRC agents, who review deaths and create change within local communities. At a local level, multi-sector groups review deaths. They gain support from DHBs, using Commission funding, for administering and coordinating reviews, as well as for collecting data and entering it into the national system.

The CYMRC oversees a large and complex system: over 400 agents in 20 groups are involved in its local review processes. These people have the special status of agents[17] under the mortality review legislation. They represent interested stakeholders that can influence change – including government and non-government representatives – and improve the health, morbidity and mortality status of children and young people in their local communities. See Appendix 3 for an overview of the CYMRC system.

LCYMRG death reviews

In the five years from 2011 to 2016, performance data for the LCYMRGs shows that multi-agency groups considered 2749 death cases in total. Their focus was on the biological, behavioural and social determinants over the life course, with the aim of creating a shared understanding of the circumstances that led to the death of a child or young person. This multi-agency process has contributed to the systematic collection of information on children and young people where the year of death was between 2002 and 2016.

As well as reviewing deaths and providing data for the CYMRC's national analysis, LCYMRGs have an important role in mobilising and embedding local change. The death review process is designed to involve the organisations and individuals that can influence and lead local change.

The performance of the LCYMRG network is reviewed on a quarterly basis, so that progress by DHBs (which facilitate and administer reviews under contract to the Commission) is monitored against the CYMRC directions. Delivery against the CYMRC death review targets is clear; any issues arising over the quarter are managed and quality improvement opportunities are highlighted. This is all communicated back to the CYMRC, so that it can in turn check its directions are appropriate and its system is sustainable and effective.

[16] CYMRC. 2016. *Review Policy.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/about-us/review-policy

[17] An individual must be made an agent of a mortality review committee to get the authorisation to request and view sensitive and confidential information about a deceased person. If an agent discloses confidential information for a reason outside of the purposes of the relevant committee, they are liable on summary conviction to a maximum fine of $10,000 and, if they are a member of a registered occupational profession, they are liable to the disciplinary proceedings of that profession.

In the first quarter of 2016–17, new contracts resulted in an impressive outcome: on average the 20 DHBs fully reviewed 70 percent of child and youth deaths (93) with cases completed. This is a full achievement of the new policy and contract expectations.

Strengthening the coordination of LCYMRGs

With a large, disseminated network, it is important to develop consistent best practice and encourage greater collaboration between groups, local coordinators and chairs.

As the CYMRC does not fund agencies to participate in local reviews, the process must be useful and of practical benefit to them. It is the CYMRC's role to provide direction and to support review groups so they can thrive and succeed.

In addition to its contract and policy work, the CYMRC undertakes other activities to help coordinators facilitate their LCYMRGs effectively. These activities include:

- national workshops – a yearly event where all the coordinators and the majority of chairs from DHBs around the country gather to discuss ways to improve the local mortality review processes. Topics have included: incorporating the Māori world view; pepi-pod use; health pathways from prison; alcohol and other drugs; the coronial process; the Vulnerable Families programme; and children of parents with mental health issues
- regional workshops and collaboration across DHBs – efforts at a national level encouraging collaboration and cooperation between LCYMRGs have been complemented by regional workshops and collaboration across DHBs.

5. Looking ahead – work underway and planned

Quality improvement

A report on SUDI: The CYMRC has done a considerable amount of work on developing a special topic report on SUDI, and is continuing to do so. Work has included a qualitative analysis of a sample of LCYMRG recommendations on 80 SUDI cases between 2002 and 2014.

Improving equity

Māori Caucus: Ethnic inequity in deaths of tamariki and rangatahi based on ethnicity in Aotearoa New Zealand continues to be a challenge. Because of its concern about the higher mortality rates for Māori children and young people, the CYMRC reallocated some of its funding to re-establish and support the mortality review committees' Māori Caucus in 2014. Two members of the CYMRC are members of the Māori Caucus, along with at least one member from each of the other mortality review committees. The Māori Caucus supports the other mortality review committees by advising on Māori mortality and morbidity, and peer-reviewing their reports.

A special topic report on Māori: The CYMRC has sought the feedback of the Māori Caucus in developing its special topic SUDI report (in progress) and will work in partnership with the Caucus to produce a report on Māori deaths in 2018–19.

Data reports: Reports focused on data will now be structured to provide separate chapters on Māori and Pacific peoples, and will include new sections on SUDI and suicide.

Appendix 1: Overview of the eleventh data report

The CYMRC's eleventh data report presents the most recent mortality data, covering CYMRC data from 2010 to 2014. The twelfth report, including 2015 data, will be available in February 2017.

The data for 2010–14 shows that, overall, the number of deaths for those aged between 28 days and 24 years has fallen, from 620 deaths in 2010 to 488 in 2014. Part of the reason for this reduction is that the number of deaths due to SUDI and the number of deaths from motor vehicle crashes in young people aged between 15 and 24 years have fallen. However, there were fewer deaths from nearly all causes in 2014.

For children and young people overall, the leading cause of death was medical conditions (39.3 percent), including neoplasms and congenital anomalies. Next was unintentional injury, accounting for 28.5 percent of deaths; within this category, transport crashes were the main cause of death.

The CYMRC found the leading cause of death changes with age. The main cause of death in post-neonatal infants was SUDI. Within this category, the main cause of SUDI was accidental suffocation and strangulation, usually in bed. Medical conditions were the leading cause of death in the age groups of 1–4 years, 5–9 years and 10–14 years. However, a substantial proportion of deaths was due to transport crashes in all of these age groups.

In the age groups of 15–19 and 20–24 years, the numbers of deaths from intentional and unintentional injury were similar. The main cause of intentional injury death in young people was suicide (90 percent), which also accounted for just under half (41 percent) of all injury-related deaths (intentional and unintentional) and just over one-fifth (21.6 percent) of total deaths for all children and young people.

Statistically significant differences in mortality rates were evident by ethnicity. Māori had the highest mortality rate, followed by Pacific peoples. Those of Asian ethnicity had the lowest overall mortality rate in children and young people. For all age groups in this report, Māori had higher mortality rates than non-Māori. This difference was consistently statistically significant in post-neonatal infants and those aged 20–24 years.

Mortality rates vary by level of socioeconomic deprivation, as measured by the New Zealand Deprivation Index. For children and young people overall, mortality rates rose with increasing deprivation: for those in deciles 1 and 2 (least deprived), mortality rates were statistically significantly lower than for those in deciles 7–10 (most deprived). Of note is that those in decile 10 had a mortality rate nearly three times higher than those in decile 1.

For most age groups, this pattern remains. In post-neonatal infants, those in quintile 5 (New Zealand Deprivation Indices 9 and 10) had a statistically significantly higher mortality rate than those in less deprived quintiles. In children aged 1–4 years, those in quintiles 1–3 had statistically significantly lower mortality rates than children in quintile 5. In children aged 10–14 years, those in quintile 5 (most deprived) had higher mortality rates than those in quintiles 1–3. In young people aged 15–19 years, those in quintiles 1 and 2 had statistically significantly lower mortality rates than those in quintiles 4 and 5. There were no statistically significant differences by deprivation in the age groups of 5–9 and 20–24 years.

Males continue to be over-represented in mortality data, accounting for 66 percent of all deaths from 2010 to 2014. While more males than females died for all causes of death, their over-representation was particularly marked in deaths due to unintentional (74 percent) and intentional (69 percent) injury.

Appendix 2: CYMRC membership and meetings

CYMRC membership

Current members

Dr Felicity Dumble (Chair)	Director of Public Health, Waikato DHB President Elect, New Zealand College of Public Health Medicine
Dr Stuart Dalziel (Deputy Chair)	Paediatric Emergency Medicine Specialist, Starship Children's Hospital, Auckland Honorary Senior Lecturer, Liggins Institute, University of Auckland
Professor Edwin Mitchell	Professor of Child Health Research, University of Auckland
Dr Terryann Clark	Senior Lecturer, School of Nursing, Faculty of Medical and Health Sciences, University of Auckland Adolescent Nurse Specialist, Counties Manukau Health Principal Investigator, Youth'12 National Youth Health and Wellbeing Survey
Dr Paula King	Public Health Medicine Specialist and Research Fellow, Te Rōpū Rangahau Hauora a Eru Pōmare, University of Otago
Professor Shanthi Ameratunga	Professor of Public Health, School of Population Health, University of Auckland
Dr Arran Culver	Clinical Leader, Younger Persons Community Mental Health Services, Capital & Coast DHB
Fale Lesa (consumer representative)	Youth Consumer Advisor, Mental Health Foundation Member, Manukau City Council Emerging Leader, Center for Strategic and International Studies (CSIS) Board Member, Drive Consumer Directions (Counties Manukau Health) Youth Programme Advisor, Affinity Services
Janine Ryland (in place of Dr Pat Tuohy)	Clinical Advisor – Child & Youth Health, Ministry of Health
Gillian Buchanan (in place of Mr Paul Nixon)	Chief Social Worker and Principal Advisor, Office of the Chief Social Worker (nominees of the Chief Executive of the Ministry of Social Development)

Current co-opted members

Kathy Mansell	Operations Director, Children's Action Plan

Former members (who served on the CYMRC for part of the period covered in this report)

- Dr Nick Baker
- Mrs Anthea Simcock
- Dr Sharon Wong
- Mr Eruini George
- Dr Anganette Hall
- Mrs Sue Matthews

For more information about the CYMRC and its current membership, see the CYMRC's section on the Commission website (www.hqsc.govt.nz/our-programmes/mrc/cymrc).

CYMRC meetings

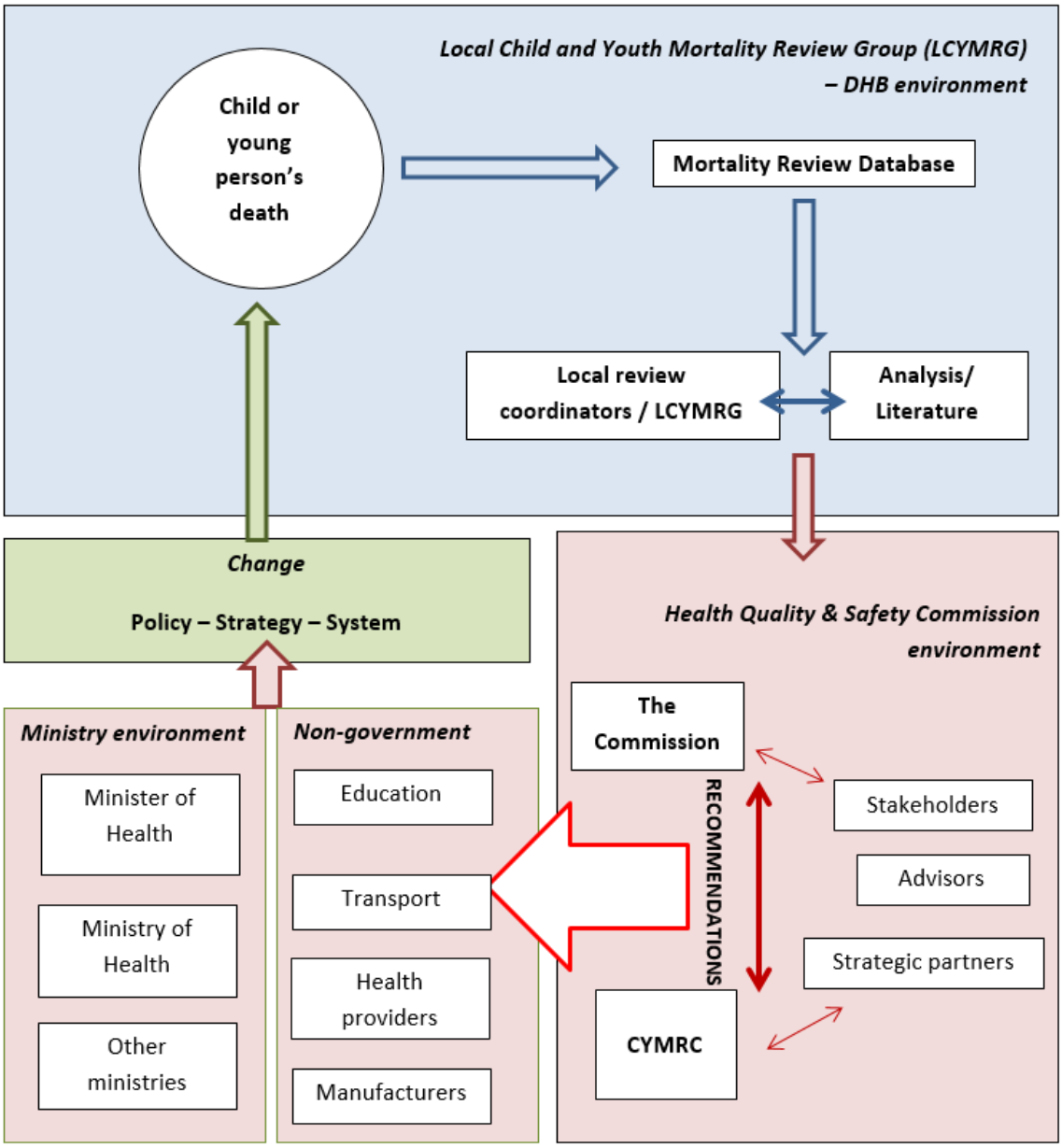
The CYMRC generally meets four times a year in Wellington.

Appendix 3: Overview of the CYMRC system

Since it began in 2001, the CYMRC has developed a sophisticated system to support its data collection, analysis and reporting functions (Figure 4).

Following every death of an individual aged between 28 days and 24 years, semi-automated data collection from multiple sources occurs. Death notifications are stored in the secure CYMRC database and initiate a lengthy process of mortality review and reporting. The New Zealand Mortality Review Data Group at the University of Otago manages the database.

Figure 4: The CYMRC data collection, review and change process



The CYMRC maintains a network of 20 DHB-based, multi-agency and sector LCYMRGs throughout New Zealand. These LCYMRGs review deaths that occur within their districts using information collected from local agents and the CYMRC database. LCYMRGs input findings and recommendations from the death reviews into the CYMRC's national database.

LCYMRGs also use the influence of their members to improve local systems in order to prevent similar deaths in the future. In reviewing cases, the LCYMRGs seek opportunities to improve the overall quality of care and services, and systems of care and communication, within each region and nationwide.

The local groups also help improve community responses following a death (for example, the way memorial services are conducted or support services offered to families, whānau and friends).

The CYMRC maintains an overview of this network, and uses the findings from the mortality review and data collection process to produce three types of reports: summaries of national data, reports on specific categories of death and DHB reports.

With the development of the National Coronial Information System, it has been possible to develop a one-to-one relationship with the coronial system, which provides information to the Ministry of Health's Information Team that can then be passed on to the various mortality committees as needed. LCYMRGs are being provided with detailed information from the national database for their local reviews.

Coronial systems provide additional information for local review, and local review is able to support the implementation of recommendations that coroners make.

Appendix 4: The CYMRC's previous recommendations and updates on progress

Achievement ratings

The tables that follow list the recommendations that CYMRC has made in special reports from 2011–15. Progress in implementing each recommendation has been rated on the following scale:

- achieved – 90–100 percent of the actions or intentions have been completed
- mostly achieved – 50–90 percent completed
- partially achieved – 10–50 percent completed
- not achieved – 0–10 percent completed.

Special Report: Mortality and morbidity of pertussis in children and young people in New Zealand – recommendations (December 2015)

Recommendation	Update	Progress as of June 2016
National policy and practice recommendations The CYMRC expects the health system to deliver high-quality equitable services that are culturally competent, health literate, and meet the health needs and aspirations of pregnant women and their whānau.		
Ministry of Health Make equitable coverage of the pertussis booster vaccination during pregnancy a quality improvement measure, or target, for DHBs.	Ministry currently working on agreeing a denominator to measure rates against.	Partially achieved
Ministry of Health Record pertussis booster vaccinations given to pregnant women in the National Immunisation Register and develop a national system for transferring the information to the infant's immunisation health record at birth.	National Immunisation Register can now record pertussis vaccinations given in pregnancy. Access to Register is improving for vaccinators outside traditional general practitioner (GP) providers. The Ministry is working on national system	Mostly achieved

	for transferring maternal vaccination information to infant's immunisation records.	
Ministry of Health Deliver a suite of education resources for pregnant women, lead maternity carers (LMCs) and other primary health care service providers, informing them of the benefits of maternal pertussis immunisation.	Since 2015 Ministry has published 6000 copies of *Let's Talk about Immunisation* for midwives, nurses, GPs and Well Child/Tamariki Ora providers. Linked to SmartStart.	Achieved
Ministry of Health and DHBs Include a maternal immunisation topic in the DHB Funded Pregnancy and Parenting Information and Education service specifications, to ensure antenatal classes provide information on pertussis booster vaccinations to expectant parents.	Maternal immunisation is included in the service specifications. Also a presentation supplied to DHBs for education.	Achieved
Ministry of Health Develop a national system helps facilitate pertussis booster vaccination referrals and improves two-way communication between GPs and LMCs. This system should: a. facilitate the safe and appropriate recall of pregnant women for their third trimester immunisation b. allow GPs and other immunisation providers to notify LMCs when the immunisation has been provided.	The Ministry has provided advice to GPs to promote use of existing tools – patient reminders and pregnancy registers. Greater access to National Immunisation Register will improve communication between GPs and LMCs.	Partially achieved
Ministry of Health Support health providers to address barriers to immunisation service access for pregnant Māori and Pacific women and their whānau.	Ongoing work to raise awareness. Promoted maternal immunisation through Whānau Parenting Tips on Facebook.	Partially achieved

Local recommendations for DHBs, PHOs, LMCs and non-governmental organisations (NGOs)		
PHOs and general practices On confirming a pregnancy, initiate a plan to safely recall the pregnant woman for a pertussis booster vaccination in the third trimester.	Need to support establishment of recall systems for pertussis.	Not achieved
LMCs When in contact with pregnant women in the third trimester, ensure those women: a. are aware that a pertussis booster vaccination in the third trimester can protect young infants from pertussis b. understand where they can go to receive a pertussis booster vaccination in their region, and are offered the vaccination, or referred to an appropriate immunisation provider.	Part of LMC service delivery.	Partially achieved
All health providers Ensure that the pregnant women they are in contact with are aware of the need for a pertussis booster vaccination in the third trimester.	Part of LMC service delivery.	Partially achieved
General practices and PHOs Support development of integrated primary care services that enable equitable and no-cost access to a pertussis booster vaccination for pregnant women in the third trimester.	Pilot in Waikato to allow pharmacist vaccinators to provide funded pertussis and influenza immunisation to pregnant women.	Partially achieved
DHBs and PHOs Establish policies that offer regular pertussis booster vaccinations to clinical and community health care workers in contact with neonates and newborns.	Over half the agencies have policies in place; many of those remaining have systems in place that promote the vaccinations.	Mostly achieved
All health providers Address barriers to immunisation service access for pregnant Māori and Pacific women and their whānau	Addressed through various means.	Partially achieved
Community – parents and caregivers Continue to immunise infants on time with the primary course of pertussis vaccinations listed in the National Immunisation Schedule (with doses at 6 weeks, 3 months and 5 months of age).	Immunisation data suggests this is happening.	Partially achieved
All pregnant women Expect a pertussis booster vaccination in their third trimester in order to protect their young infants from pertussis. This booster should be delivered in every pregnancy.	Immunisation data suggests this is happening.	Partially achieved

Special Report: Child and youth mortality from motorcycle, quad bike and motorised agricultural vehicle use – recommendations (December 2014)

Recommendation	Update	Progress as of June 2016
Data collection		
RO1.a. When serious injuries or fatalities involving off-road vehicles occur, a high-quality incident scene and vehicle assessment as well as analysis should take place regardless of the location of the event or the activity at the time.	Police Serious Crash Unit is involved in most of these cases now. Awaiting or in discussion with Serious Crash Unit about ensuring this is made into policy and reviewing the scope.	Mostly achieved
RO1.b. The role of the **Police Serious Crash Unit** should be reviewed with a view to ensuring it is involved with all deaths related to motor vehicles.		Mostly achieved
RO1.c. Coroners Seek analysis from the Police Serious Crash Unit with regard to all deaths related to motor vehicles.	Coroners have asked for some analysis.	Partially achieved
RO1.d. Information about the details and themes related to fatalities should be systematically shared with others, including the lead agency for injury prevention (see recommendation 2 below), vehicle manufacturers and distributors, and other relevant community organisations.	Accident Compensation Corporation (ACC) is active in this area.	Partially achieved
National policy		
RO2. A single agency should take responsibility for child and youth injury prevention via cross-sector planning, implementation and evaluation of interventions that address child and youth safety around the use of all off-road vehicles (quad bikes, motorcycles and motorised agricultural vehicles) in work, home and recreation. This broad approach to injury prevention should be led by the Accident Compensation Corporation (**ACC**) and form part of its current work on injury prevention. A detailed review of all injuries sustained by children and young people from using off-road vehicles should be included in the scope of this injury prevention work.	ACC is currently doing quite a bit of work in this area.	Not achieved

RO3. Ministry of Business, Innovation and Employment (MBIE) Consider adopting the American National Standard Institute's (ANSI's) safety standards for quad bikes and side-by-side vehicles (SSVs) so that all off-road vehicles entering New Zealand are built to minimum construction standards.	Trading Standards attended the CYMRC meeting in February 2015 to explain that it is unlikely to carry out this recommendation in the near future.	Not achieved
RO4. MBIE Consider the increasing numbers of international recommendations that children younger than 16 years of age should not operate quad bikes of any size. Parents and caregivers should be made aware of these overseas recommendations to support the safety of their children.	ACC confirms this is being debated, but there is opposition.	Not achieved
RO6. Some of the current exemptions for farmers under the Land Transport Act 1998 should be re-evaluated. These exemptions include: on-road use of farm bikes, registration and ongoing maintenance requirements, helmet use, and the implications for employers. While these exemptions apply to riders over 15 years of age, children aged 15 years and under will be influenced by their older role models.	No reported action.	Not achieved
RO9. Design engineers and manufacturers Consider including various vehicle safety mechanisms on quad bikes made for children and young people that prevent: sudden accidental surges of power, children from using vehicles outside the manufacturer's weight recommendations, and crushing and asphyxia injuries caused by quad bike rollover.	No reported action.	Not achieved
Health promotion		
RO5. For children who ride motorbikes, risks may be reduced by training programmes on bike safety. Training on off-road vehicles should be available to children and young people, and encouraged before any child or young person rides. Training programmes need to teach all users how to ride safely and strengthen awareness of risks associated with riding both two- and four-wheeled vehicles. These programmes should be targeted to rural, farming and agricultural sectors, be multifaceted, include school-based education, consider the developmental attributes of children, and be guided by established behaviour change theories.	A number of training programmes are now in place; ACC recently released a special app for children about farm safety.	Partially achieved

RO7. Local rural NGOs, local government and DHBs Develop skills and education programmes for parents, children and young people who live rurally on or near farms, and are users of quad bikes. These programmes should: **a.** be school- and community-based **b.** include training on 'active' bike riding skills (including how to distribute one's weight safely while riding the vehicle) **c.** include education on injury prevention and harm minimisation (eg, helmet and protective clothing use) **d.** identify safe recreation areas and no-go zones for children on farms **e.** be appropriately designed for the cognitive and physical developmental level of the child or young person.	A number of training programmes are now in place; ACC recently released a special app for children about farm safety.	Partially achieved
DHB policy		
RO8. DHB public health services, emergency departments and trauma services, local governments Participate in International Safe Communities activities to address local two-wheeled and quad bike injuries, as appropriate to their populations.	No reported action.	Not achieved

Special Report: Unintentional suffocation, foreign body inhalation and strangulation – Recommendations (March 2013)

Recommendation	Update	Progress as of June 2016
US1. CYMRC Report mortality data in ways that demonstrate that a large proportion of SUDI is due to unintentional injury through suffocation, in order to highlight appropriate prevention strategies.	CYMRC has been providing these reports. See its 10th Data Report. See also the 2015 Safekids infographics on injury.	Achieved
US2.a. Ministry of Health and DHBs The CYMRC recommends that safe sleep for every New Zealand infant should be a high priority of government departments and agencies, district health board, health providers and families and whānau. Multipronged interventions to increase the prevalence of safe sleep should include the following.	The Ministry of Health, DHBs and several NGOs support health and other social service providers across New Zealand with SUDI prevention in a wide range of ways. Every DHB	Achieved

	in New Zealand now has a safe sleep policy, and contracted providers are, to varying degrees, required to comply with these policies although audit of safe practice needs further work.	
US2b. Health and social service providers Provide safe places to sleep, in the form of cots, wahakura or pepi-pods, to families that meet an agreed threshold of need. Raise awareness of the different programmes available – either nationally or within their local area – that provide safe sleep devices for families in need.	Work has been carried out in this area.	Achieved
US2c. **Health Promotion Agency** Increase community awareness and education through health promotion and social marketing about the risks and circumstances in which suffocation in place of sleep occurs and how these situations can be avoided. Appropriate Māori and Pacific community leaders are seen as key influencers to support families in establishing safe sleeping routines from birth.	The Health Promotion Agency has carried out work in this area.	Mostly achieved
US2d. Māori and Pacific community leaders Establish a clear national strategy to highlight the risks that can arise when an infant shares a sleep surface with another person who is asleep, while also emphasising the benefits of breastfeeding and skin-to-skin contact while awake.	Some work has been carried out.	Partially achieved
US3. Health care professionals At every point of contact with young women, pregnant women, babies and children, ask about smoking, provide information about the increased risks to baby's health from smoke exposure, and offer assistance to become smokefree, including referral to smoking cessation services. Efforts to reduce uptake of smoking by young Māori women are especially important.	Ministry of Health is continuing to emphasise the importance of stopping smoking in pregnancy.	Achieved
US4.a. CYMRC Convene a meeting of senior key stakeholders in infant product safety – including the Ministry of Social Development, MBIE, ACC and the Ministry of Health – to discuss current prevention efforts and to identify leadership. The CYMRC will seek to have the following ideas, strategies and approaches considered.	The CYMRC has convened this meeting.	Achieved
US4.b. **Ministry of Health, Ministry of Social Development, MBIE and ACC** Develop a memorandum of understanding to improve information sharing between the Ministry of Health, Ministry of Social Development, MBIE and ACC to allow information regarding deaths and injury	This memorandum of understanding has not been developed and continues to be debated.	Not achieved

associated with products to be monitored and acted on appropriately.		
US4.c. Commerce Commission Enforce mandatory standards AS/NZS 2172:2003, AS/NZS 2195:2010, AS/NZS 2130:1998 for cots and bassinettes.	Mandatory standards are enforced, but there is debate over voluntary standards and the need for improved standards. Trading Standards is developing better standards for safe sleep spaces.	Partially achieved
US4.d. Make information on safe cots available to all purchasers at the point of sale, even when sales are online.	TradeMe provides this information, but it is unclear how widespread this practice is.	Partially achieved
US4.e. Health care providers and welfare agencies use the 'Keeping Kids Safe' simple checklist of cot safety, before and after birth, as well do families, whānau and sellers of used cots.	Some DHBs have picked up this practice as part of safe sleep policy work, but the practice is not consistent.	Partially achieved
US4.f. Support **retailers** to positively influence families by being a greater source of information about safe sleeping through having literature available in their stores, and making sure that all displays demonstrate good safe sleep practice by displaying cots with correctly sized mattresses, no pillows, and blankets rather than duvets.	'Change for our Children' have begun to monitor displays and advertisements.	Partially achieved
US4.g. Increase consumer and retailer awareness and education regarding the hazards of curtain and blind cords and the availability of solutions to reduce risks.	Some extra publicity and media coverage have occurred.	Partially achieved
US4.h. Home service providers use visits to homes as opportunities to highlight and address risks and provide information.	Training resources and opportunities have increased substantially but it is unclear how much these have increased skill and action.	Partially achieved
US4.i. **MBIE** Provide more informative and explicit hazard labels, outlining actual risk of strangulation or choking for products.	Some labels are present, but no evidence of improvement is available.	Not achieved

US4.j. Ministry of Social Development Provide, and more actively promote, the support available to eligible families to obtain a safe sleep space through the use of special needs grants.	Some leaflets are available, which ties in with DHB policy work.	Partially achieved
US5. Government departments and agencies Continue to fund and support unintentional suffocation research, particularly into the efficacy and safety of the pepi-pod and wahakura.	Departments and agencies have carried out this work and continue to do so.	Achieved
US6. Government departments and agencies, DHBs and health providers Develop recommendations around systems that identify needs before birth and ensure continuity of care after birth, with high levels of engagement with GP and Well Child services.	Newborn enrolment and early booking for maternity care have been strongly promoted. Integration pilots are in progress. A number of new training packages are in place.	Mostly achieved
US7. Government departments and agencies, DHBs and health providers Clarify who has the primary duty of care for newborn infants under one month of age. While early enrolment with GPs and Well Child services is important, LMCs and midwives play a key role in supporting engagement with health care as well, and there needs to be a strong focus on the baby's health, wellbeing and injury prevention.	Freedom around early enrolment with Well Child has increased, but this work is in its early stages.	Partially achieved
US8. CYMRC Meet with the Ministry of Social Development to discuss its role in the prevention of suffocation and strangulation, as it is the lead agency for cross-sector injury prevention work for infants and children (as the New Zealand Injury Prevention Strategy states).	Lead for injury prevention was transferred to ACC, but then the work stalled. No agency is currently leading this work.	Not achieved
US9. Health Promotion Authority Take a centralised approach to the development and dissemination of safe sleep resources. Anecdotal evidence suggests that many well-meaning agencies and groups develop resources that are not consistent, which further complicates the need to provide simple, direct, evidence-based safe sleep messages.	The Health Promotion Authority is the single source of the new leaflet, which it based on this report. However, competing e-learning packages are available.	Mostly achieved
US10. Ministry of Education, with input from the Ministry of Health Reinforce key messages on suffocation in bed, choking and strangulation in the National Administration Guidelines that the Ministry of Education provides to early childhood education providers and schools.	The CYMRC exchanged letters with the Ministry of Education, and Felicity Dumble met with Ministry staff in August 2014 to discuss this issue. In these communications, the Ministry pointed to where to find this information in its national guidelines.	Achieved

US11.a. DHBs Have a safe infant sleeping policy, incorporated into Ministry of Health requirements for DHBs, that adheres to CYMRC guidelines and is agreed by neonatal, antenatal, postnatal and paediatric services.	All DHBs have a safe infant sleeping policy.	Achieved
US11.b. Staff who support families caring for infants (including GPs, PHOs, NGOs, LMCs, midwives, neonatal and paediatric nurses) receive training and updates about prevention of SUDI and ways of communicating risks to families as part of their core training.	Uptake of training has varied between DHBs as policies are not fully implemented.	Partially achieved
US11.c. DHBs Parents need to readily see and observe safe sleeping practices for all infants within DHB facilities so they will better understand how to practise safe sleep after they are discharged home.	Unsafe sleep in DHBs is rare.	Achieved
US11.d. DHBs or other agencies Safe sleeping arrangements are available for all infants after they are discharged home – meaning that the DHBs or other agencies should provide safe sleep devices for at-risk families if they are unable to obtain one; in addition, health care providers need to plan ways to undertake home visits to assess the quality of the baby's sleep space, especially for infants with the greatest vulnerability.	Safer sleep spaces are widely used across New Zealand.	Mostly achieved
US11.e. Provide families with education and supports, offered in te reo Māori and Pacific languages, tailored to their level of need about the hazards that arise in some sleeping situations.	Whakawhetu has developed specific resources.	Mostly achieved
US11.f. Support all parents and caregivers to be smokefree, especially during pregnancy, and **DHBs** have a focused smokefree policy to ensure that all parents and caregivers are screened about smoking (particularly in regard to the exposure of newborns to tobacco smoke), receive advice about the increased health risks caused by tobacco smoke, supported to become smokefree, and offered referrals to smoking cessation services.	Universal requirements for DHBs to screen for smoking provide support for and report on this practice within the maternity quality and safety programme.	Achieved
US11.g. Give parents advice on safe strategies for night feeds and settling infants.	Work is in progress to make this advice part of training programmes.	Partially achieved
US11.h. Health care professionals give parents consistent advice about safe sleep practices.	The consistency of messages has improved greatly, but some parts of the health workforce are still resisting the move to provide clear, consistent messages.	Mostly achieved

US11.i. Monitor safe infant sleep practices as a quality indicator for maternity and child health facilities, ensuring meaningful outcomes are measured (such as what parents are doing, rather than recording that safe sleep was discussed).	Publications on safe infant sleep practices are available, but work is ongoing to raise visibility of this indicator in maternity quality and safety standards.	Partially achieved
US12. DHBs Have a safe sleep coordinator and a safe sleep action group, consisting of midwives, GPs, Healthy Populations, Well Child providers, paediatric and neonatal staff and Māori health providers, that meets regularly. The safe sleep action group will support the safe sleep coordinator to coordinate and deliver up-to-date education, policies and resources for safe sleep while also auditing and evaluating DHB practices.	Most DHB have picked up some safe sleep grouping, but more work is needed to make the practice universal.	Mostly achieved
US13. DHBs Have systems in place that ensure early identification of vulnerable infants (before birth) and ensure high-quality, intersectoral interventions and supports are in place for those vulnerable infants, including those needed to support safe sleep. This means developing individual care plans that name the services to be involved with each individual, family and whānau; are culturally appropriate; and include all members of the health care teams, including midwives. For a plan to be effective, the family and whānau must 'own' it. Details of the plan need to be recorded, and implementation needs to be monitored and evaluated.	Vulnerable women care pathways are widespread but not universal. Some DHBs have care planning in place.	Partially achieved
US14. DHBs Ensure that Well Child providers deliver messages to caregivers regarding safe sleep and how to prevent strangulation and choking. Where possible, these messages should be supported by providing caregivers with resources and safety equipment, such as curtain cord cleats.	Awareness has grown, but it is not universal. More work is needed.	Partially achieved
US15. Health care providers Assess needs and plan with families to enable safe sleep through interventions and supports that make safe sleep options easy to understand and practise. These actions should start before birth and be reviewed at birth and again in the postnatal period. Rather than develop new agencies and programmes, it is important to consider existing programmes that might do such work, such as the Hutt Valley DHB Regional Public Health 'Healthy Housing Project' or existing Well Child providers.	Pepi-pod programmes have seen a real growth in assessment and intervention. Most DHBs now have a programme.	Mostly achieved
US16. Provide appropriate instructions for use, followed by monitoring and evaluation, where pepi-pods and wahakura are used.	Instructions provided. Monitoring and evaluation projects carried out.	Achieved

US17. Antenatal courses should discuss how to prevent unintentional suffocation and strangulation, and cover treatment protocols, in addition to SUDI and safe sleep practices. Encourage parents to take CPR and choking first aid courses as well.	Courses have improved somewhat, but because NGOs often deliver them it is hard to have full control.	Partially achieved
US18. Offer after-death care and support to families and whānau where an infant or child dies in hospital or the community.	Case control study has helped, but there is no guarantee that its practices will continue. A number of DHBs and NGOs are working to improve the quality of culturally appropriate and timely after-death care and support.	Partially achieved

Special Report: Unintentional deaths from poisoning in young people – recommendations (August 2013)

Recommendation	Update	Progress as of June 2016
RP1.a. Ministry of Health and Ministry of Social Development Sustain the current focus on the Children's Action Plan. These actions, as well as directly supporting vulnerable children, will, in the long term, reduce deaths from poisoning. Areas of importance with regard to upstream actions to reduce poisoning include te following.	The Vulnerable Children Act was passed into law in July 2014. The Act includes a number of measures for keeping children safe – including standards safety checking for government-funded children's workforce and new requirements for government agencies to fund their providers to adopt child protection policies. Changes stemming from the Vulnerable Children Act are gradually being phased in over several years. Children's Teams are being rolled out nationally. Children's Teams are currently focusing on the safety and wellbeing of each child they work with by: • assigning a lead professional to bring together a Child Action Team of people from iwi/Māori, health, education, NGOs welfare and social services • making a plan to support each child using the local community and referring children to local professionals who work with family/whānau to keep the plan on track.	Partially achieved
RP1.b. Support tobacco and alcohol control, especially for young women before conception and antenatally.		Partially achieved
RP1.c. Conduct family violence screening.		Mostly achieved
RP1.d. Support women and families exposed to multiple disadvantages, including the strengthening of their connections with community supports.		Partially achieved

RP1.e. Support young women in having control of their fertility.		Partially achieved
RP1.f. Develop interventions that are most effective for Māori to reduce the inequalities.		Not achieved
RP2. ACC New Zealand Injury Prevention Action Plan includes a specific cross-government priority area on youth injury prevention. This priority area should take a wide prevention approach with a focus on youth injury from a developmental perspective, including links to and support of the actions within the Children's Action Plan to reduce duplication of effort. Specific actions on poisoning deaths deserve attention in keeping with their importance as the second most common cause of injury death in young people.	The New Zealand Injury Prevention Action Plan has been through a number of development phases and leadership changes that have slowed progress in this area. The plan was changed to the Cross-government Injury Prevention Work Plan in 2013. ACC is currently the lead agency for injury prevention work.	Not achieved
RP3.a. The lead youth injury prevention agency, appointed under the New Zealand Injury Prevention Action Plan, leads a portfolio of actions around youth substance abuse and its legislation, in order to achieve the following.	ACC is the lead agency for injury prevention in New Zealand.	Not achieved
RP3.b. Reduce the attractiveness and demand.	To date, no actions focused on injury prevention have been taken for recommendations.	Not achieved
RP3.c. Reduce access to substances, especially butane.	Retailers are more aware, and are limiting access to substances.	Partially achieved
RP3.d. Provide effective screening and intervention to support minimisation of harm for those affected.	Some of the Youth Mental Health Project initiatives will progress recommendation 3c.	Partially achieved
RP4. Health Quality & Safety Commission and mental health services Ensure the new serious incident review process is working for patients known to mental health service providers who die from poisoning. Such processes will require improved prospective surveillance, so	As the majority of mental health services are delivered in the community. The serious adverse events review process focuses on DHB-based deaths (as only DHB-based service providers are required to report serious adverse events).	Not achieved

services are aware of deaths, as well as the collection, thematic analysis and sharing of information in ways that lead systems improvement both locally and nationally.		
RP5. DHBs Consider the needs of their community and services available, then develop clinical pathways and plans that describe how care joins up, including: brief interventions, primary mental health care, community providers, Alcohol and Other Drug (AoD) services, mental health services, and school-based services. Such care pathways and plans must make it easy for young people, families, schools and GPs to know when to seek and get the right care or support to prevent or minimise harm from substance use.	This work has fallen under the scope of the multi-agency Youth Mental Health Project, coordinated by the Ministry of Health. Under the project, the Ministries of Health, Education and Social Development, and Te Puni Kōkiri have taken a range of actions relevant to this recommendation. These include: • the Werry Centre (Auckland) developing the HEEADSSS assessment training package, and expanding its use in schools and primary care settings • the Ministry of Social Development conducting the Youth Referrals Pathways Review (to review the integration, consistency and effectiveness of referral pathways in the youth mental health system and make recommendations for improvements) • improving access to good-quality information on youth mental health, wellbeing and where to seek help for parents, families and friends. A set of new initiatives is under way to improve referral pathways and mental health care models for young people. These actions include: • identifying actions to improve awareness of youth mental health issues and knowledge of available services; strengthening workforce capability; and assessing the feasibility of 'navigator' support functions • identifying opportunities to develop more integrated funding models and Youth Wellness Hub services to support integrated youth service provision across social services and primary care • investigating the feasibility and value of co-locating additional social services in schools. For more information, see the Youth Mental Health Project web page: www.health.govt.nz/our-work/mental-health-and-addictions/youth-mental-health-project/youth-mental-health-project-initiatives#new.	Partially achieved

RP6. Reducing medication-related harm in all settings from unintentional poisoning, suicide and substance abuse is a complex area with many organisations potentially involved. It is important that they work collaboratively and data held by these organisations is converted into information and shared effectively by creating strong feedback loops with prescribers and dispensers about practices that help reduce medication-related harm. The Medication Safety Expert Advisory Group or the CYMRC should organise or facilitate a meeting to bring these groups together, aiming to develop better systems to reduce the burden of poisoning in young people from prescribed medicines.	The Department of Preventive and Social Medicine (Otago) convened a Drug Safety Colloquium meeting in June 2014, which discussed research on the safety of prescription medicines using routinely collected data. Safety discussions focused on adverse reactions to medicines that had been prescribed and taken correctly. A national pharmacoepidemiology research network was established as a result of the meeting. The New Zealand Pharmacovigilance Centre has expressed interest in helping move this recommendation along; it has done extensive work in developing a national Medication Error Reporting Programme and a Centre for Adverse Reactions Monitoring programme, and has the knowledge to help set up national data systems to monitor poisoning from prescribed medicines.	Partially achieved
RP7. Ministry of Health Consider contracting a national organisation, such as the New Zealand Drug Foundation, to work in partnership with media organisations (including digital media providers) to develop a resource highlighting good practice with regard to the media coverage of poisoning. Until such time as this resource is developed, guidance from the Australian 1985 Senate Select Committee on Volatile Fumes should be followed. All those who provide information on poisonings to the media (eg, police, coroners and health professionals) should guide the media about the safe use of such information and the Australian guidance until New Zealand guidance is available.	The Ministry of Health contracted the New Zealand Drug Foundation to develop the media guidelines on volatile substance abuse in 2013. This work has been completed.	Achieved
RP8. **Relevant government departments and agencies** Fund more research around the areas of poisoning and substance use highlighted in this report. This would further enhance understanding of the issues for those affected, and also enable more New Zealand-specific responses to be developed.	The Centre for Public Health Research (Massey University) published the Annual Hazardous Substances Injury Report for 2014; includes a section on injuries from huffing (recorded on the national Hazardous Substances Surveillance System). • 'huffing' continues to be an issue for those aged 15–24 years • Māori have higher discharge rates for poisoning than non-Māori	Not achieved

	• toxic gases (LPG, methane, propane and butane) were the most common substance causing death within the age group of 15–24 years from 2007–12. There is a need for further research in this area and also a need for one government agency to take responsibility and coordinate a programme of actions. Increased use of the HEEADSSS assessment in primary care will help identify young people using substances, but public health interventions (youth health promotion and education) and accompanying research that demonstrates programme effectiveness still need to be improved to prevent poisoning injuries and deaths. The issues for Māori youth could be further investigated in the CYMRC's Māori report planned for 2017–18.	

Special Report: Low speed run over mortality – recommendations (August 2011)

Recommendation	Update	Progress as of June 2016
Local government policy – injury prevention		
RLS.1. Territorial authorities Create and implement strategic policy, programmes and projects to reduce the exposure of children to environments that provide a high risk of injury from moving vehicles. This will include introducing regulatory requirements for child safety and providing educational resources for the building sector and general public.	It is unclear how many territorial authorities are doing this. Safekids engaged with Hamilton City Council, but the Council only included the word 'safety' in design site layout.	Not achieved
RLS.2. New Zealand Transport Agency, Ministry of Transport and local government Guidelines for driveway design need to be extended to consider the safety of children and others on the driveway itself.	It is unclear if any territorial authorities are doing this.	Not achieved

Housing		
RLS.13. Landlords, including Housing New Zealand Lead prevention activity aimed at separating driveways from areas of play. Changes to the ResidentialTenancies Act could be considered to support such action.	Housing New Zealand provides information to its tenants and any other property owners on driveway safety. See www.hnzc.co.nz/for-our-tenants-and-their-communities/our-tenants/health-and-safety/our-driveway-safety-programme-reducing-the-risk-of-children-being-run-over.	Achieved
RLS.3. **Housing New Zealand** Modify over time all of its current stock so that driveways are separated and children have safe play areas.	Housing New Zealand has taken this recommendation on board.	Achieved
RLS.4. **Housing New Zealand** Ensure that all new developments are constructed so that driveways are separated and children have safe play areas.	Housing New Zealand has taken this recommendation on board.	Achieved
Data collection – injury prevention		
RLS.14. **Police Serious Crash Unit** Use the information collected through systematic monitoring of low speed vehicle fatalities and the impacts of preventive campaigns for research and ongoing audit for continuous improvement.	The Police Serious Crash Unit is more likely to be doing assessments of driveway run over. Systems to share still need work.	Partially achieved
RLS.5. **ACC** Take responsibility for the systematic data collection on all low speed child run over injuries and mortalities, while the Police Serious Crash Unit should be responsible for a full site assessment of all low speed child run over deaths.	Safekids reports that ACC is currently working on this recommendation by exploring its dataset using keyword searches; the Police Serious Crash Unit is collecting some of this data but it is not clear how comprehensive the site assessments are.	Not achieved
RLS.8. **Police** Test for alcohol-related impairment whenever a child suffers a serious injury or fatality regardless of location.	Police Commissioner supported the report and its recommendations; issues around privacy and/or fears of upsetting families at death scene investigations.	Not achieved
National policy – transport		
RLS.6. Police, Ministry of Transport, Automobile Association, driving instructors, and road safety co-ordinators Include driveway safety in driver licensing training and testing.	Stocktake required of those that include driveway safety in their driver licensing programme.	Not achieved

Vulnerable children		
RLS.7. Te Puni Kōkiri, the Ministry of Social Development, the Ministry of Pacific Island Affairs and the Ministry of Health Fund injury prevention via future Whānau Ora initiatives. Programmes where home visits occur – particularly in areas of high deprivation – provide opportunities for injury prevention.	Plunket is exploring the inclusion of child injury prevention as part of its home visit programme.	Not achieved
RLS.12. Māori and Pacific health and social services Be lead partners in a campaign designed to communicate both the lethal risk of vehicles moving at low speed and the protective effects of interventions such as: environmental changes in domestic properties, improvements to vehicle visibility, and driveway safety behaviours.	Explicit partnership has not been identified to date.	Not achieved
Health promotion – driveway safety		
RLS.9 All providers and services working with families Be familiar with the range of injury prevention driveway run over resources to educate caregivers, available both nationally and through their local Safekids New Zealand Coalition.	Plunket has picked up driveway safety, Safekids training sessions.	Mostly achieved
RLS.10. Services that carry out home safety assessments and Well Child consultations, and early childhood education providers, schools, and parent education groups Give driveway safety messages that promote 'check, supervise and separate' as part of routine, anticipatory guidance.	Some agencies are doing assessments.	Partially achieved
RLS.11. Well Child providers Make driveway safety part of all Well Child care, with special emphasis given at the Well Child nine-month child health assessment.	Safekids will include this recommendation in its new home safety initiative for 2016–17.	Partially achieved

Special Report: The involvement of alcohol consumption in the deaths of children and young people in New Zealand during the years 2005–07 – recommendations (September 2011)[18]

Recommendation	Update	Progress as of June 2016
RA1. Enforce the zero blood alcohol concentration for young and novice drivers.	In 2011, the blood alcohol concentration was lowered to zero for young drivers. Issues around novice drivers are still being addressed.	Achieved
RA2. Enforce legislation designed to prevent young people from breaching the conditions imposed by their type of driver licence, including: legal alcohol limit, transporting passengers, and driving outside curfew hours.	The Ministry of Transport's graduated licensing scheme has been strengthened, and public advertising campaigns conducted.	Achieved
RA3. Limit the availability of alcohol and make alcohol less attractive by:		
a. raising the price of alcohol	Low-cost alcohol is still available for young people, particularly ready-to-drink beverages (RTDs).	Not achieved
b. raising the purchasing age	Presently, it is illegal to sell alcohol to anyone under 18 years of age. Proposals were made for raising the minimum purchasing age when the Sale and Supply of Alcohol Act was amended in 2012, but no action was taken.	Not achieved
c. initiating debate on minimum drinking ages	Although there is no minimum drinking age, the amendment to the law in 2012 generated quite a bit of discussion. Strict guidelines on providing alcohol to anyone under 18 apply.	Achieved
d. limiting trading hours	See recommendation RA4 below.	Mostly achieved
e. requiring responsible beverage service training programmes	The Sale and Supply of Alcohol Act 2012 requires a Host Responsibility Policy in order to get a liquor licence.	Mostly achieved

[18] Child and Youth Mortality Review Committee. 2011. *Special Report: The involvement of alcohol consumption in the deaths of children and young people in New Zealand during the years 2005–2007.* Wellington: Child and Youth Mortality Review Committee. URL: www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/2 (accessed 3 November 2016).

f. preventing advertising of alcohol	Some restrictions exist, but there is a very long way to go before alcohol is treated like smoking.	Partially achieved
g. eliminating the links between role models, sport and alcohol.	The Ministerial Forum on Alcohol Advertising and Sponsorship was established in February 2014 to consider whether further restrictions on alcohol advertising and sponsorship are needed to reduce alcohol-related harm. The Forum completed its review and provided its report to the Associate Minister of Health and Minister of Justice in October 2014. The Forum's principal concern was identifying opportunities to influence and prevent alcohol-related harm, especially for young and vulnerable people.	Partially achieved
RA4. Communities ought to consider establishing liquor bans via local legislation in areas that are of high risk.	Every council must have a local alcohol policy. In this way local government can develop local policies to restrict access to alcohol, especially around licensing hours and access.	Mostly achieved
RA5. Provide a mandate to test for alcohol-related impairment whenever a child or young person suffers a serious injury or fatality, regardless of location.	No progress has been made; this is limited by law.	Not achieved
RA6. Provide opportune psychosocial screening (as in the HEEADSSS assessment) to all young people.	Training of screeners has improved. Work is required to ensure effective screening is more common.	Partially achieved
RA7. Use brief interventions for non-dependent, yet high-risk adolescents.	South Island has brief assessments of alcohol-related harm in emergency departments; this occurs in parts of the North Island as well.	Partially achieved
RA8. Conduct opportune risk assessments for alcohol-related violence and seek to intervene where appropriate.	Better training for such assessments exists now, but there is still work to do to make this more common.	Partially achieved
RA9. Develop initiatives to broaden the public's understanding of risks of combining alcohol and hazardous environments.	Some publicity, but no systematic advertising has been undertaken.	Partially achieved
RA10. Every child or young person needs a sober caregiver or a sober mate at all times.	Health promotion around safe sleep frequently gives this message, but work is needed in other areas.	Partially achieved

RA11. Extend host responsibility and health promotion messages.	Legislative responsibilities are clear that parents must give consent before a person can give alcohol to someone aged under 18 years, but more promotion of this message is needed.	Partially achieved
RA12. In education about the hazards of alcohol in the community, highlight the trends toward younger teenagers and females dying as a result of other people's alcohol use rather than their own.	Not yet publicised widely.	Not achieved