

23 October 2019

Committee Secretariat  
Finance and Expenditure Committee  
Parliament Buildings  
Wellington

Dear Chair and Committee Members

### **Arms Legislation Bill**

Thank you for the opportunity to submit on the Bill. The Suicide Mortality Review Committee (the SuMRC) supports the Bill, and our recommendations pertaining to particular clauses can be found on pp 6–7.

#### **Background**

##### SuMRC

The SuMRC is a national committee which sits within the Health Quality & Safety Commission and is charged with reviewing and reporting on suicide deaths in New Zealand with a view to reducing deaths.

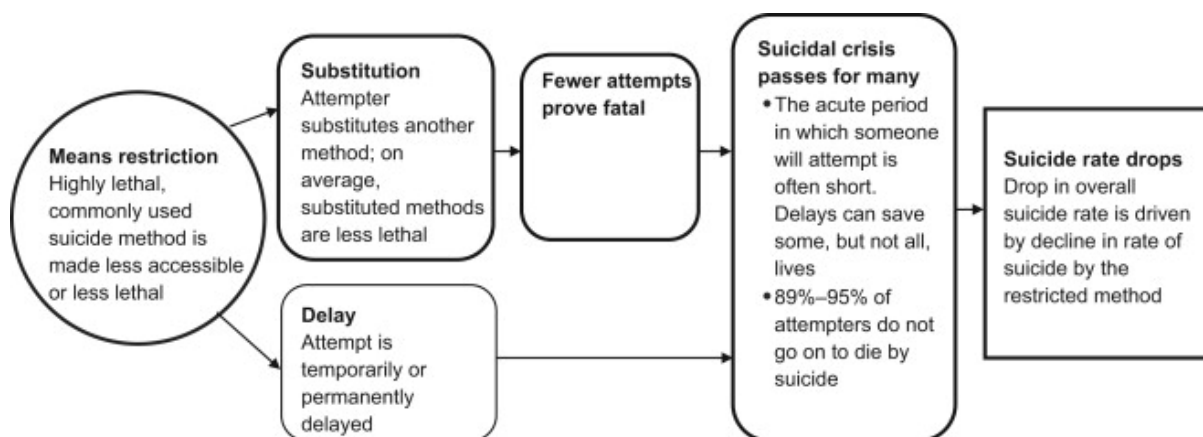
##### Suicide in New Zealand

Data on those who die by suicide in New Zealand is recorded in the Mortality Collection managed by the Ministry of Health. The determination of suicide is made through the coronial process and so there is a delay in the availability of suicide counts and rates. The most recent available information is for 2016, and this data remains provisional. In 2016, 553 people died by suicide, with an age-standardised rate of 11.3 deaths per 100,000 people. This population rate has remained relatively stable over the past 10 years, although the rates among Māori men have increased markedly in recent years (Ministry of Health 2019).

##### Suicide prevention – role of means restriction

Limitation of access to lethal methods (or 'means restriction') is one of the most effective strategies for suicide prevention (Zalsman et al 2016). Although some people will seek access to alternative means, many do not, and where they do the alternative means chosen is often less lethal. Many suicide attempts occur with little planning during a short-term crisis, and so ready access to lethal means is important in determining the outcome. Intent isn't all that determines whether an attempter lives or dies; means also matter. Almost all (90 percent) of attempters who survive do NOT go on to die by suicide later. Where firearms are

used as the means, suicide attempts are almost universally fatal, and are very often the first known attempt (Spicer 2000). Therefore any action to reduce the availability of firearms to the population has the potential to prevent suicide and save lives. (Yip 2012; Barber 2014).



*Conceptual model of how reducing access to a highly lethal and commonly used suicide method saves lives at the population level, from Barber 2014.*

## Suicide involving firearms in New Zealand

The following is a brief analysis of suicides between the years 2000 and 2015 where firearms are recorded as the means of suicide. This analysis uses de-identified data from the Statistics New Zealand Integrated Data Infrastructure.<sup>1</sup> All counts are random rounded to base 3.

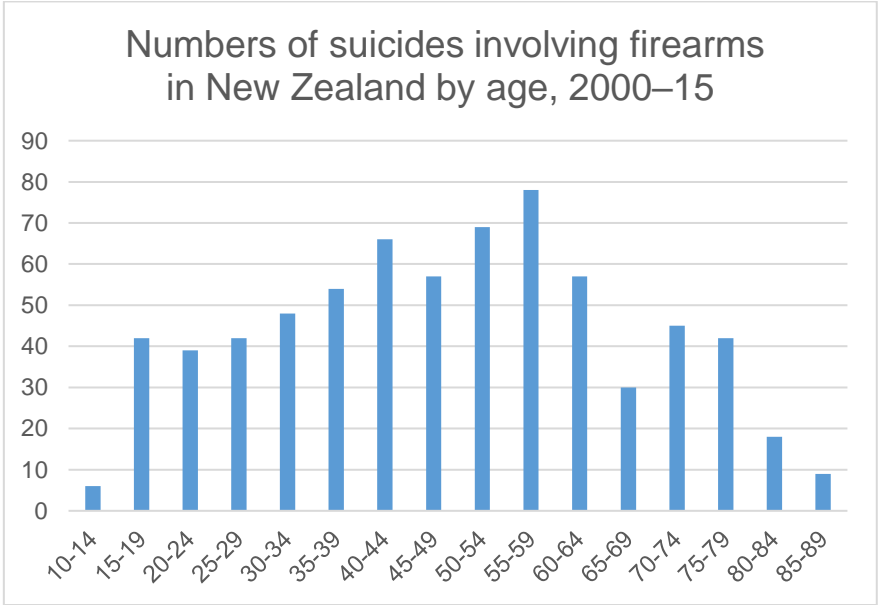
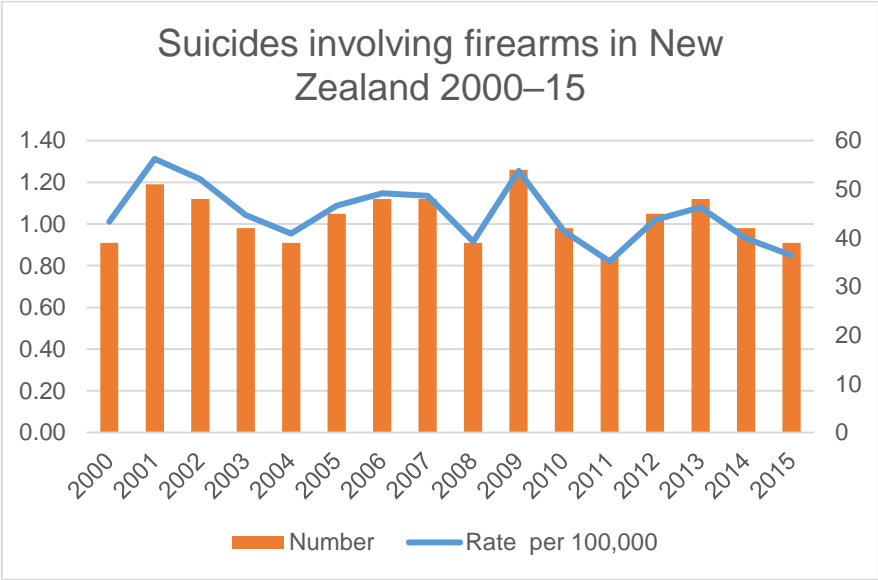
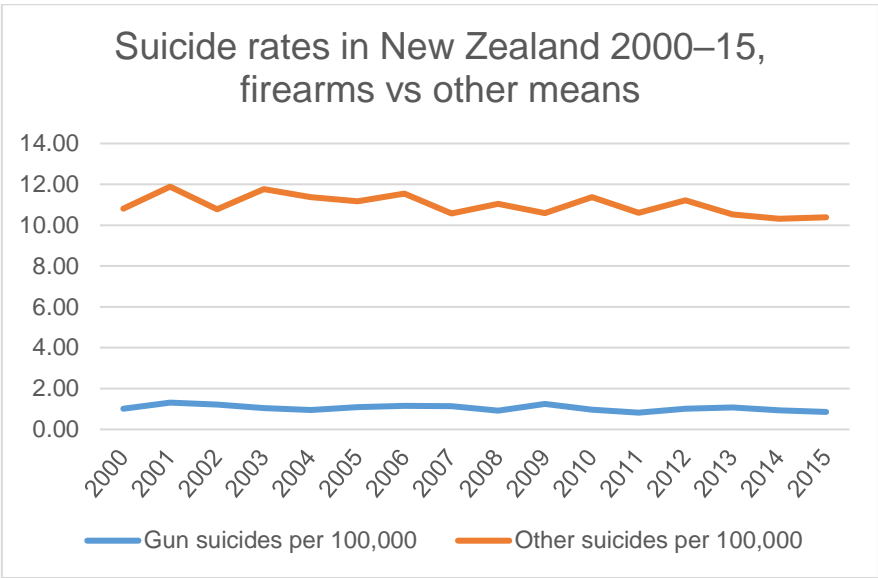
Self-inflicted injury is the leading cause of firearm related death in New Zealand, with approximately 50 deaths per year. Over the period 2000–15 there were 867 deaths recorded as caused by a firearm, of which 708 (82 percent) were recorded as self-inflicted. Firearms are used as the method in approximately 10 percent of all suicides in New Zealand, and this pattern has remained unchanged over the last 15 years.

Prior to the 1992 Amendment to the Arms Act which introduced more restrictive requirements for gun ownership, firearm suicides comprised approximately 18 percent of suicides in New Zealand (Beautrais 2006).

<sup>1</sup> Disclaimer: The results in this report are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI), managed by Statistics New Zealand. The opinions, findings, recommendations, and conclusions expressed in this report are those of the author, not Statistics NZ.

Access to the anonymised data used in this study was provided by Statistics NZ under the security and confidentiality provisions of the Statistics Act 1975. Only people authorised by the Statistics Act 1975 are allowed to see data about a particular person, household, business, or organisation, and the results in this report have been confidentialised to protect these groups from identification and to keep their data safe.

Careful consideration has been given to the privacy, security, and confidentiality issues associated with using administrative and survey data in the IDI. Further detail can be found in the Privacy impact assessment for the Integrated Data Infrastructure available from [www.stats.govt.nz](http://www.stats.govt.nz).



Those who die by suicide involving firearms in New Zealand are almost all men, ranging in age from less than 20 to over 80. More than half live in rural or small urban areas, and the majority are Pākehā New Zealanders, although 10 percent of those who die by suicide involving firearms are Māori. There is no clear pattern by deprivation, with New Zealanders living in both deprived and affluent areas experiencing gun suicide.

Only one quarter of those who die by gun suicide have previously been treated with antidepressants, which is lower than the one-third of those who died by other methods of suicide. Similarly, those who die by suicide using a gun have lower levels of prior contact with specialist mental health services or hospital treatment for self-harm than those who die by other methods. They also are very unlikely to have attended a mental health services (11 percent) or previously attended hospital for self-harm (5 percent).

Table 1 below shows the demographic distribution of those who die by suicide involving firearms compared to other suicides. In comparison to others who have died by suicide, those who had died using a firearm were more likely to be Pākehā men, older and living rurally, and were less likely to have accessed care for mental health problems. This reflects the demographic profile of licensed firearm owners.

*Table 1: Comparison of characteristics of people who died by suicide using a firearm, compared to those who used other means, 2000–15*

	Suicides involving a firearm		Suicides by other methods	
Mean age at death	48.7 years	%	40.0 years	%
<b>Ethnicity (not mutually exclusive)</b>				
European/Pākehā	645	91%	5,601	75%
Māori	72	10%	1,617	22%
Pacific peoples	6	1%	447	6%
Other	9	1%	420	6%
<b>Gender</b>				
Male	669	94%	5,424	73%
Female	42	6%	2,007	27%
<b>Rurality</b>				
Large or major urban	231	33%	4,773	64%
Small or medium urban	153	22%	1,356	18%
Rural	219	31%	801	11%
missing	108	15%	501	7%
<b>Deprivation NZDep2013 quintile</b>				
1 (least deprived)	105	15%	978	13%
2	105	15%	1,089	15%
3	159	22%	1,314	18%
4	126	18%	1,599	22%
5 (most deprived)	108	15%	1,905	26%
missing	108	15%	543	7%
<b>Prior history of mental health problems</b>				
Prior antidepressant prescription	177	25%	2,346	32%
Prior mental health service use	81	11%	1,770	24%
Prior hospital admission for self-harm	39	5%	1,554	21%

Table 2 shows the distribution of occupation as recorded on the death certificate. The majority were in employment, with at least one third employed in the rural sector.

*Table 2: Occupation as recorded on death certificate of those who die by suicide involving a firearm, 2000–15*

<b>Occupation</b>	<b>n</b>	<b>%</b>
Farmer (incl retired)	120	17%
Farm worker	48	7%
Other rural sector	54	8%
Trades and technicians	102	15%
Machinery and transport	27	4%
Professionals and managers	53	8%
Police/army/professional hunter	15	2%
Other employment	160	23%
Student/apprentice/trainee	36	5%
Not in employment	42	6%
Retired	60	9%

### **Gun policy and suicide involving firearms**

Access to firearms is a strong risk factor for suicide and being a victim of homicide (Anglemyer 2014). There is strong evidence that more restrictive gun laws are associated with lower rates of suicide involving firearms. Multiple cross-sectional studies comparing jurisdictions have found that more restrictive gun laws are associated with lower rates of firearm suicide, with many also finding lower rates of suicide overall (Kaufman et al 2018).

Moreover, before and after studies have shown clear reductions in firearm suicide after the introduction of more restrictive laws including background checks, restriction of access to members of the armed forces, and storage requirements (Santaella-Tenorio et al 2016).

The most consistent evidence of a reduction in firearm suicides is from jurisdictions which have simultaneously introduced a package of laws aimed at tightening multiple aspects of firearm control (Santaella-Tenorio et al 2016). For example studies from Australia have found that the introduction of the 1996 National Firearms Agreement (NFA) was associated a reduction in firearms and total suicide rates (Chapman et al 2006, Chapman et al 2016).

Gun storage practices also have an important effect on suicide rates. Guns in the home, however stored, are a risk factor for suicide. However, where the gun is stored loaded this risk increases dramatically, and even more so when the gun is also unlocked (Kposowa 2016; Barber 2014). Requiring separate storage of firearms and ammunition is therefore important for suicide prevention.

There is mixed evidence about the substitution of methods after access to firearms has been reduced, with some studies finding reductions in overall suicide rates and others finding that the reduction was limited to firearms suicides.

For example, a New Zealand study looked at changes in suicide after the 1992 Amendment to the Arms Act and found a reduction in firearm suicides, particularly for young people but

not overall suicide rates (Beautrais 2006), while in other jurisdictions such as Australia have seen overall reductions in suicide rates following legislative change (Chapman et al 2006). Where means substitution does happen, the alternate means is likely to be less lethal than a firearm, providing a greater chance of survival (Spicer and Miller 2000).

There have not been studies examining the impact of firearm legislation on suicide rates for particular ethnic groups. It will be important to examine the impact of any law change on suicide rates for Māori.

Evidence of the impacts of restricting access to firearms for people who are known to be experiencing mental health problems is limited. There is clear evidence that the major danger people with experience of mental illness who have access to firearms pose is to themselves (Baumann and Teasdale 2018).

While the vast majority of people with serious mental illness are never violent, mental illness is a strong risk factor for suicide, including firearm related suicide (Swanson et al 2015). A 2014 consortium on gun violence and mental illness concluded that 'restricting firearm access on the basis of certain dangerous behaviours is supported by the evidence; restricting access on the basis of mental illness diagnoses is not' (McGinty et al 2014).

We are therefore recommending that specific reference to mental health is removed from the legislation and replaced with reference to behaviour and cognitive and physical functioning. This will make it clear that it is the behaviour and functioning and not the diagnosis which is important to consider in permitting access to firearms.

## **Recommendations**

**The SuMRC supports** the following proposals which have the potential to reduce rates of suicide involving firearms in New Zealand:

- The introduction of a compulsory gun registry in New Zealand
- A reduced license period (five years)
- Inspection of gun storage for all firearms (not just restricted firearms), including a requirement for firearms and ammunition to be stored separately
- Continuation of face to face in person vetting process when applying for or renewing licences, including speaking to family members.

The SuMRC makes the following recommendations for amendments to the proposed legislation:

We are unclear as to the purpose of section 23(2A) requiring the health practitioner to be named when applying for a license. As the New Zealand population is highly mobile any list of health practitioners kept on file will not be up date and therefore will be of little use.

**We recommend** that Section 24(1b) which relates to storage facilities be amended to specify separate storage of firearms and ammunition. Separate storage slows down access to lethal means for suicide and therefore provides more time for intervention or a change of mind.

**We recommend** that Section 24(A) which relates to being a ‘fit and proper person’ is amended such that subclauses f, g and h (relating to mental health and substance use) are removed and a separate clause is inserted which enables a member of the police to consider the applicants cognitive and physical function and recent behaviour. This may include considerations of suicidal ideation, plans, attempts and substance use.

There is no need to explicitly refer to ‘mental health issues’ and it is stigmatising to suggest that such issues mean that someone is not a fit and proper person. Such an extra clause should make it clear that such a judgement on behaviour and functioning is time-limited and will need to be reassessed.

It is not that the person themselves is not fit or proper but that their current state of functioning means that they are not in a position to safely be in control of a firearm. An explicit time period in which an applicant may reapply could be specified, as behaviour and functioning, including suicidality, change over time and, particularly where a firearms licence is required for employment, past mental health or substance use concerns should not be an exclusion to ever having a license.

**We recommend** that Section 91 which relates to medical reports be amended such that in:

- 91(1) ‘the mental or physical condition of the licence holder’ be replaced with ‘the cognitive or physical functioning or behaviour of the licence holder’
- 91(1) A ‘the mental or physical condition of the licence holder’ be replaced with ‘the cognitive or physical functioning or behaviour of the licence holder’.

As above we suggest that referring to mental health is stigmatising and not necessary. We note that assessment of the risk of suicide by a health practitioner is a very difficult and that prediction of patients’ suicide risk is very unreliable and has not been shown to reduce suicides. In comparison restriction of access lethal means has the strongest evidence for suicide prevention (Zalsman et al 2016). Therefore relying on primary care practitioners to predict the risk of suicide will not be an effective strategy. Moreover, as is shown in our data, the majority of those who die by suicide involving a firearm do not have a history of prior self-harm or treatment for mental health conditions.

We also note that temporary suspension is the most appropriate course of action when recommending removal of a firearm on the grounds of acute deterioration in functioning and it is important to distinguish between such a situation and other situations such as criminal violent acts which may warrant permanent revocation of a license.

## **Conclusions**

Self-inflicted injury is the major cause of firearm related death in New Zealand. The proposed tightening of regulation of guns and gun storage in New Zealand has the potential to slow down access to firearms, increasing opportunities for intervention, and reduce the rate of deaths due to firearms. Deaths due to firearms affect almost entirely men in every section of New Zealand society, but particularly our rural sector.

The SuMRC supports the proposed amendments to the Arms Act. We suggest wording changes in relation to the ‘fit and proper person’ test and responsibilities of medical practitioners to remove reference to mental health and replace it with reference to cognitive

and physical functioning and behaviour. We also suggest specific reference to separate storage of firearms and ammunition in the legislation, and the continuation of the face to face in person vetting process for firearms licensing.

The SuMRC would like to present an oral submission.

Yours sincerely

Prof Rob Kydd  
**Chair, SuMRC**

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