There is no substantial international or New Zealand evidence on the effect of three strikes laws on crime. The existing evidence is mixed and more robust research is needed to understand the true effects of these laws.

**OVERVIEW**

- So-called ‘three strikes’ laws are a type of law designed to selectively incapacitate repeat offenders by mandating lengthy prison sentences for those convicted of particular types of crime more than once (most commonly serious violent and sexual crimes).
- Research in this area appears to be prone to political bias. To date there have been no international meta-analyses or systematic reviews on whether three strikes laws reduce crime.
- Furthermore, individual studies come mainly from U.S jurisdictions and have found mixed results with different studies finding such laws either decrease, increase or have no effect on crime.
- In 2010 the New Zealand Government introduced the Sentencing and Parole Reform Act (SPRA) to target repeat violent offenders. This Act is commonly referred to as the three strikes regime in New Zealand.
- There have been no studies conducted on whether New Zealand’s three strikes law reduces crime, although observations of crimes targeted by the law do not appear to demonstrate any obvious effects.
- The three strikes law is estimated to cost the New Zealand government over $2.7 million by the year 2020 with costs steadily increasing over the next 50 years.

- Further research on the crime reducing effects of New Zealand’s three strikes law is needed to make any firm conclusions regarding the law’s effect.

**EVIDENCE BRIEF SUMMARY**

<table>
<thead>
<tr>
<th>Evidence rating:</th>
<th>Inconclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit cost:</td>
<td>$61,543 per prisoner until population exceeds current capacity. $110,075 mean cost per prisoner as prison capacity is expanded.</td>
</tr>
<tr>
<td>Effect size (number needed to treat):</td>
<td>Unclear.</td>
</tr>
<tr>
<td>Current spend:</td>
<td>$800,059 (as of July 2018)</td>
</tr>
<tr>
<td>Unmet demand:</td>
<td>N/A</td>
</tr>
</tbody>
</table>
WHAT IS THE THREE STRIKES LAW?

The three strikes laws refer to a class of internationally used laws that mandate lengthy and sometimes indefinite sentences for certain types of habitual offenders. Typically, the law identifies a list of offences that qualify for strikes, and specifies a warning be given for any first conviction of a ‘strikeable’ offence (‘strike one’), followed by increasingly harsher penalties for any subsequent convictions of strikeable offences (i.e. strikes two and three).\(^i\)

The type of offences that qualify for strikes and the penalties associated with second and third strikes vary widely by jurisdiction.

The purpose of a three strikes laws is to (1) deter offenders from specific crimes by increasing punishments for repeat offenders, and (2) incapacitate offenders who repeat such crimes despite the increase in penalty.

New Zealand three strikes law

The 2010 New Zealand three strikes law (SPRA) details a three-stage system of increasing penalties for repeat offenders of serious violent and sexual crimes.\(^i\)

If an offender is convicted for one of the 40 qualifying offences for the first time (with no previous strike warnings), they receive an official first ‘strike’ warning. If they are convicted of a second qualifying offence they are given a final warning (second strike), and if they are sentenced to imprisonment they may serve the full sentence without parole.\(^iii\)

If an offender is convicted of a third qualifying offence the court may impose the maximum penalty without parole, unless the court considers the sentence manifestly unjust. Finally, if the offender is convicted of murder on their second or third strike the court may impose a life sentence without parole, unless the court considers the sentence manifestly unjust.\(^iv\)

DO THREE STRIKES LAWS REDUCE CRIME?

International evidence

To date there have been no meta-analyses or systematic reviews on the effect of three strikes laws on crime. Most individual studies are based on the effects of such laws in the United States and more specifically California State. Furthermore, these individual studies have provided considerably mixed results.

Some US studies on three strikes laws have found crime reducing effects for both minor and serious violent crimes as well as reduced arrest rates among offenders who received a first or second strike.\(^v\) However, an equal number of studies have found no effect on the crime rate or found that the apparent effects of the law disappear when changes on other societal variables, such as alcohol consumption, are accounted for.\(^vi\)

Furthermore, a third group of studies suggest that while the law appears to reduce crime in some jurisdictions, it also increases crime in others. Similarly, other studies have shown that while the law reduces some types of crime (e.g. burglary) it can potentially increase more serious types of crime (e.g. murder).\(^vi\)

New Zealand evidence

There has so far been no substantial research on whether the New Zealand three strikes law (SPRA) reduces crime, and due to the length of time it takes to obtain a third strike, it is too soon to evaluate the full effects of the law.
From June 2010 (when the law first came into effect) until September 2018, New Zealand offenders received 10,433 first strikes, 338 second strikes and 6 third strikes. Currently, there are about 125 first warnings and 7 final warnings per month. Like the New Zealand prison population, Māori and Pasifika were overrepresented in the proportion of strikes received (Māori = 48%, Pasifika = 15%, European = 33%) when compared to the general population. Māori also represent 45% of offenders given a first warning and 55% given a final warning. Out of all the strikes issued thus far, 90% of first strikes and 95% of second strikes have been issued for just three categories of offences: sexual assault, robbery, and serious assault.\textsuperscript{viii}

Looking simply at changes in the rate of these three categories of offences since the New Zealand three strikes law came into effect we can see few changes that are easily attributable to the new law (see Figure1).

As shown in Figure 1 since the three strikes law came into effect there has been a small decrease in robbery and a small increase in sexual assault, however both crime rates do not fall far outside rates observed in the years prior to the law’s implementation. Furthermore, although there was a substantial decrease in serious assaults after the law came into effect, this decrease began before the law was implemented and does not appear to decrease below rates observed in the years before the law came into effect.\textsuperscript{x} Between 2005-2010 there were 16,319 convictions for qualifying offences. In the years 2013-2017 there were 17,508 convictions of qualifying offences. Convictions have proven to be stable, even increasing since the law was enacted. Based on the data alone, there is no distinct indication that the three strikes legislation is deterring individuals from committing qualifying offences.

Although observational analysis of crime trends can provide some basic preliminary evidence of the law’s effects, a thorough statistical analysis of the law’s effects on crime in New Zealand is needed before any firm conclusions can be made. Ideally, in order to properly evaluate the deterrent effects of the law, a study comparing the rate at which consecutive first, second and third strike offences were committed in the years before and after the laws initiation would be a useful first step.

Modelling by the New Zealand Ministry of Justice suggests that the number of first strikes committed since the law’s implementation are in line with the number of first strikeable offences committed before the law came into effect. However, in comparison with second strikeable offences committed before the law came into effect there has been a drop in the number of second strike offences since the law’s implementation.\textsuperscript{xi}

\textbf{Figure 1.} New Zealand crime rates of sexual assault, robbery and serious assault before and after the three strikes law came into effect.\textsuperscript{xii}
WHEN IS THE THREE STRIKES LAW MOST EFFECTIVE?

There has been little research comparing different variations of the three strikes law on crime reduction. However, one study did find that United States counties that applied the law more often did not experience any greater reductions in crime than counties that applied the law less often.\textsuperscript{xii}

OTHER CONSEQUENCES OF THE THREE STRIKES LAW?

Effects on the prison population and criminal justice system

There is some international evidence to suggest that three strikes laws contribute to increased growth in the prison population.\textsuperscript{xiii}

However, much like the evidence regarding the effects of the laws on crime rates, there is also research suggesting that three strikes laws have no effect on the prison population or actually reduce growth in the prison population.\textsuperscript{xiv}

One study found that the three strikes law only increased growth in prison populations and court cases in California where strikes are issued more frequently because any offence can qualify for second and third strike penalties. This was contrasted with other US states where strikes were issued far less frequently, and there was virtually no impact of the laws on prison population or court case growth.\textsuperscript{xv}

CURRENT INVESTMENT IN NEW ZEALAND

Financial cost of three strikes law

Based on modelling by the New Zealand Ministry of Justice it has been predicted that the three strikes law will lead to a prison population increase of 45 by the year 2020 and 300 by the year 2060.\textsuperscript{xvi} Based on the ethnic proportions of those currently receiving strikes these increases will disproportionately affect Māori and Pasifika.\textsuperscript{xvii} Using the figures of predicted prison increases and the marginal per year cost of a New Zealand prisoner ($61,543)\textsuperscript{xviii} the three strikes law will cost the government over 2.7 million ($2,769,435) by the year 2020, and 18 million ($18,462,900) by the year 2060. However, as the effect size increases the cost per prisoner will be more accurately captured by the average cost per prisoner of $110,075 because eventually new prison beds will need to be built and this cost ought to be distributed evenly across all incoming prisoners.\textsuperscript{xix} This makes estimating the actual cost very approximate.

The three strikes law may also increase court costs by increasing the frequency of non-guilty pleas on strikeable offences, due to increased penalties for these offences.\textsuperscript{xx} There is also some evidence that the three strikes law may have an influence on parole board decisions causing prisoners to serve greater proportions of their sentence without parole, thus reducing the effect size of the three strikes law. These factors make it extremely difficult to accurately isolate the effect size, and therefore cost of the law.\textsuperscript{xxi}
EVIDENCE RATING AND RECOMMENDATIONS

Each Evidence Brief provides an evidence rating between Harmful and Strong.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmful</td>
<td>Robust evidence that intervention increases crime</td>
</tr>
<tr>
<td>Poor</td>
<td>Robust evidence that intervention tends to have no effect</td>
</tr>
<tr>
<td>Inconclusive</td>
<td>Conflicting evidence that intervention can reduce crime</td>
</tr>
<tr>
<td>Fair</td>
<td>Some evidence that intervention can reduce crime</td>
</tr>
<tr>
<td>Promising</td>
<td>Robust international or local evidence that intervention tends to reduce crime</td>
</tr>
<tr>
<td>Strong</td>
<td>Robust international and local evidence that intervention tends to reduce crime</td>
</tr>
</tbody>
</table>

According to the standard criteria for all Evidence Briefs, the appropriate evidence rating for three strikes law is Inconclusive.

As per the standard definitions of evidence strength outlined in our methodology, the interpretation of this evidence rating is that:

- there is conflicting evidence that interventions can reduce crime
- it is highly uncertain whether the investment will generate a return even if implemented well

First edition completed: December 2017

Updated: December 2018

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1 Available at www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/

FIND OUT MORE

Go to the website
www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/

Email
whatworks@justice.govt.nz

Recommended reading

Citations

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iv Sentencing and Parole Reform Act 2010
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x New Zealand Crime Statistics 2013/14
xi Paul Henderson, personal communications June 2017
xii Male et al 1999
xiii D’Alessio & Stolzenberg 1999, Zhang et al 2009
xiv Dickey & Hollenhorst 1999, Zhang et al 2009
xv Austin et al 1999
xvi Paul Henderson, personal communications July 2018
xvii Olsen 2015
xviii Tony De Gregorio, personal communications June 2018
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xx Paul Henderson, personal communications July 2018
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Personal communications with Paul Henderson, Principal advisor, Forecasting, June 2017. Ministry of Justice - Sector Analysis and Modelling. Contact Paul.henderson@justice.govt.nz


