

# Implementation of Regulatory Controls on High-power Laser Pointers

Year 7

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# 1 Introduction

This report discusses the seventh year of the Ministry of Health's (the Ministry's) implementation of regulatory controls on high-power laser pointers (HPLPs).

The Government introduced the controls to manage the risks arising from the public's easy access, at low cost, to powerful, hand-held, battery-operated laser pointers by limiting supply.

Immediately after the controls came into force on 1 March 2014, the availability of these devices on New Zealand-based auction websites and in shops dropped significantly, but advertising on auction websites has slowly increased over time. Reported incidents of HPLPs being shone at aircraft initially showed a small decrease and then a gradual increase. In the past year, however, the number of HPLPs advertised on auction websites and the number of aircraft strikes have both decreased, almost certainly due to COVID-19 restrictions on flights and people's movements.

Implementation of the controls has not created a significant burden for officials. In the past year, the number of applications for authorisations has increased slightly from 15 authorisations granted the previous year to 18 for this report year. The Ministry updates information about the regulations on its website when necessary.<sup>1</sup> In the coming year, the Ministry will review the conditions imposed in authorisations to check that they are effective and whether additional conditions might be needed to promote health and safety around using more powerful HPLPs. Surveillance work planned for the coming year will again focus on online sales, alongside a review of historical authorisations issued.

This document reports on the Ministry's activities in terms of regulating HPLPs in the most recent implementation year. It looks at the numbers of authorisations and the extent of public interest in the regulations for this period, then goes on to report on surveillance and compliance activity by the Ministry, the New Zealand Customs Service and the New Zealand Police respectively. A full description of the legislative background is included as an appendix to this report.

<sup>1</sup> See the Ministry of Health's webpage Questions and answers: New controls on high-power laser pointers at URL: [www.health.govt.nz/our-work/environmental-health/high-power-laser-pointers/questions-and-answers-new-controls-high-power-laser-pointers](http://www.health.govt.nz/our-work/environmental-health/high-power-laser-pointers/questions-and-answers-new-controls-high-power-laser-pointers)

# 2 Authorisations

## 2.1 Applications

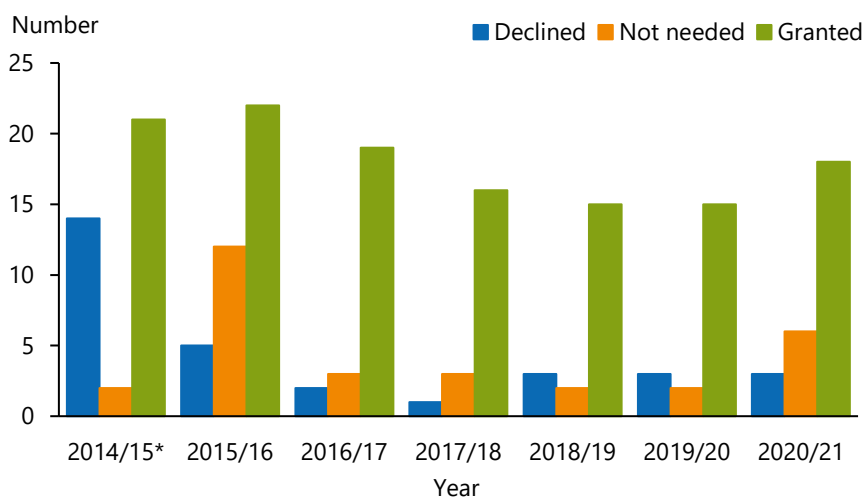
Figure 1 below summarises the outcomes of all applications for authorisation to import, supply or acquire HPLPs (or any combination of those activities) since the regulations came into force.

Most recent applications have been for importing by users who already belonged to a pre-approved class of applicant. The main reason for declining applications continues to be insufficient information on the proposed use or an incomplete application.

In general, the Ministry continues to encounter few problems in its processing of applications. It requests external technical advice if there is doubt over the use proposed for the HPLP or a particular device's output power. Where the Ministry has imposed conditions on an authorisation, these have generally been to limit the import/supply/acquisition to the types and quantities of HPLPs described in the application, for the uses described and to meet safety measures.

The Ministry's authorisation letters currently highlight the importance of storing HPLPs safely, and reminds those issued an authorisation, under the Summary Offences Act 1981, it is an offence to be in possession of a high-power laser pointer in a public place without a reasonable excuse. Over the coming year, the Ministry will review the conditions imposed by authorisations to check their effectiveness and whether additional conditions might be needed to promote safe use of the more powerful HPLPs. Ministry officials will also carry out a review and audit of past authorisations to check on compliance.

**Figure 1: Number of applications declined, not needed and granted, 2014–2021**



\* The figures presented in the first-year implementation report may differ slightly due to small changes in classification of outcomes.

## 2.2 Public information

Since the regulations came into force, the Ministry has maintained a webpage that provides an overview of the regulations and includes a 'Questions and answers' section.<sup>2</sup> Figure 2 presents the numbers of page views for those two pages, not counting repeat visits.

**Figure 2: Number of views of the Ministry's regulations webpages, by year**

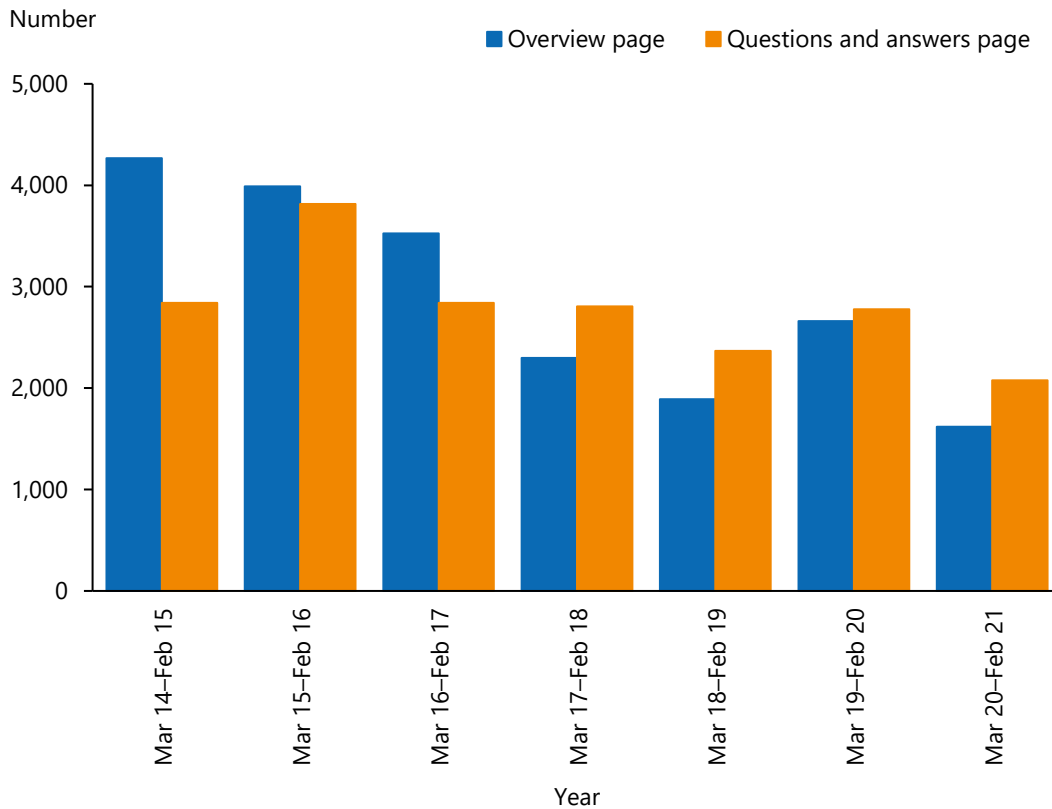
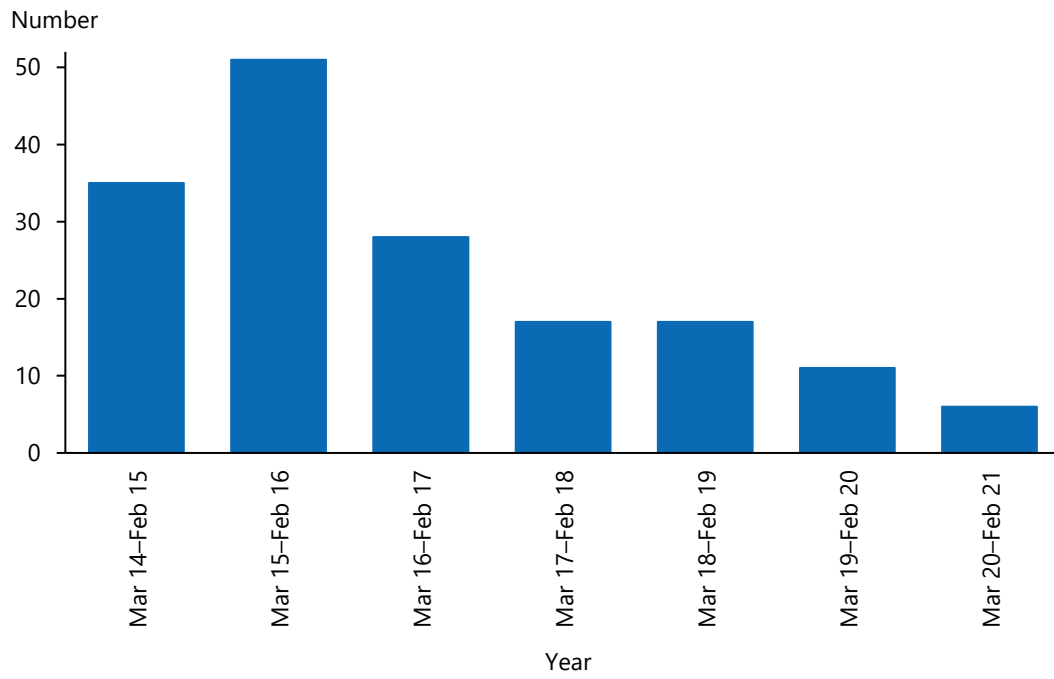


Figure 3 summarises the queries about the regulations that the Ministry has received by phone or email since the regulations were introduced.

<sup>2</sup> Ministry of Health. 2014. High-power laser pointers. URL: [www.health.govt.nz/our-work/environmental-health/high-power-laser-pointers](http://www.health.govt.nz/our-work/environmental-health/high-power-laser-pointers) (accessed 19 April 2021).

**Figure 3: Number of queries about the regulations received by the Ministry, 2014–2021**





# 3 Surveillance and compliance

During this annual implementation period, the Ministry's surveillance and compliance activities have concentrated on online sales rather than shop visits.

## 3.1 Retailer visits

The Ministry made no formal retailer visits during this implementation period.

## 3.2 Distributor visits

The Ministry did not undertake any distributor visits during this implementation period.

## 3.3 Online surveillance

### 3.3.1 Trade Me surveillance

Before the introduction of the regulations, HPLPs were readily available at low prices through online auction sites, such as Trade Me. When the regulations came into force, Trade Me placed HPLPs on their 'Banned and restricted' list.<sup>3</sup> Initially, Trade Me did not permit international sellers to list HPLPs on Trade Me, but this restriction appears to have been relaxed.

Figure 4 shows the numbers of individual listings for HPLPs considered to fall within the scope of the regulations, obtained through weekly surveillance of Trade Me.<sup>4</sup>

<sup>3</sup> See Trade Me blog. 2014. High powered laser pointers cannot be sold on Trade Me. URL: <https://help.trademe.co.nz/hc/en-us/articles/360010959212-Banned-and-restricted-#lasers> (accessed 7 April 2021).

<sup>4</sup> Numbers from 1 March 2014 to mid-May 2014 have been estimated, based on the number of listings for the rest of the year.

**Figure 4: Number of listings for high-power laser pointers on the Trade Me auction website, 2014–2021**

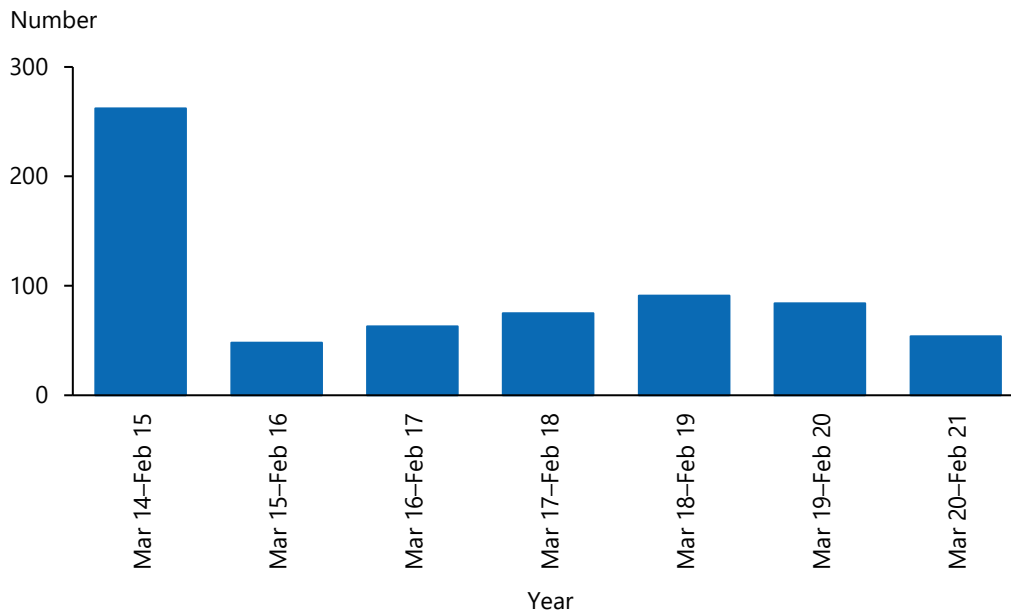


Figure 4 shows that, after an initial decrease, the number of listings rose slowly and then began to decline subtly from 2019. Listings in 2020–21 were probably low because of COVID-19 restrictions on air travel and people’s movements.

Because of the continued listings of HPLPs, often from new and/or overseas sellers, the Ministry’s surveillance should continue. As in previous years, the Ministry has found that a few sellers gave false descriptions, claiming untruthfully that their pointers have an output power of less than 1 milliwatt (mW). Others do not mention the power. The Ministry occasionally purchases pointers for testing.

The Ministry, where necessary, uses its Trade Me compliance account<sup>5</sup> to bring sellers’ attention to the regulations and to ask questions about devices where the output power is less evident. This account was not used during this reporting period.

The Ministry notes that Trade Me is quick to remove listings when it has reason to believe that a pointer falls within the scope of the regulations and would like to acknowledge the assistance received from Trade Me to this end. The Ministry will talk with Trade Me further about potential additional controls, especially for overseas sellers.

### 3.3.2 Other online sales

The Ministry did not undertake surveillance of other New Zealand-based online sales outlets during this implementation period. The Ministry has no control over online sales in other countries.

<sup>5</sup> Ministry of Health has a Trade Me email account that can be used to send advisory messages to sellers or to enable Trade Me users to report listings through a ‘community watch’ function.

# 4 New Zealand Customs

The Customs Import Prohibition (High-power Laser Pointers) Order 2019 (CIPO) prohibits the importation of HPLPs.

Table 1 summarises HPLPs seized by New Zealand Customs (Customs) since 2014. (The comments section in this table lists a range of Asian countries; the Ministry notes that HPLPs are unregulated and widely available in South East Asia.)

**Table 1: Number of high-power laser pointers seized by Customs, 2014–2021**

Year	Number of items	Comments
2014/15	229	Comprised mostly small numbers in any one incident; there were three seizures of 20 or more
2015/16	699	Included one large shipment of 600; the rest comprised small or individual numbers
2016/17	51	Included 40 seizures from travellers returning from Bali or Thailand
2017/18	67	Comprised 53 interceptions, mostly from travellers returning from holiday in South East Asia
2018/19	62	Comprised 50 interceptions; just over half were domestic mail interceptions. The passenger interceptions were from travellers returning from holiday, primarily from Thailand, with some from China
2019/20	89	Comprised 77 interceptions
2020/21	35	Comprised 11 interceptions, with 24 pointers seized in one interception

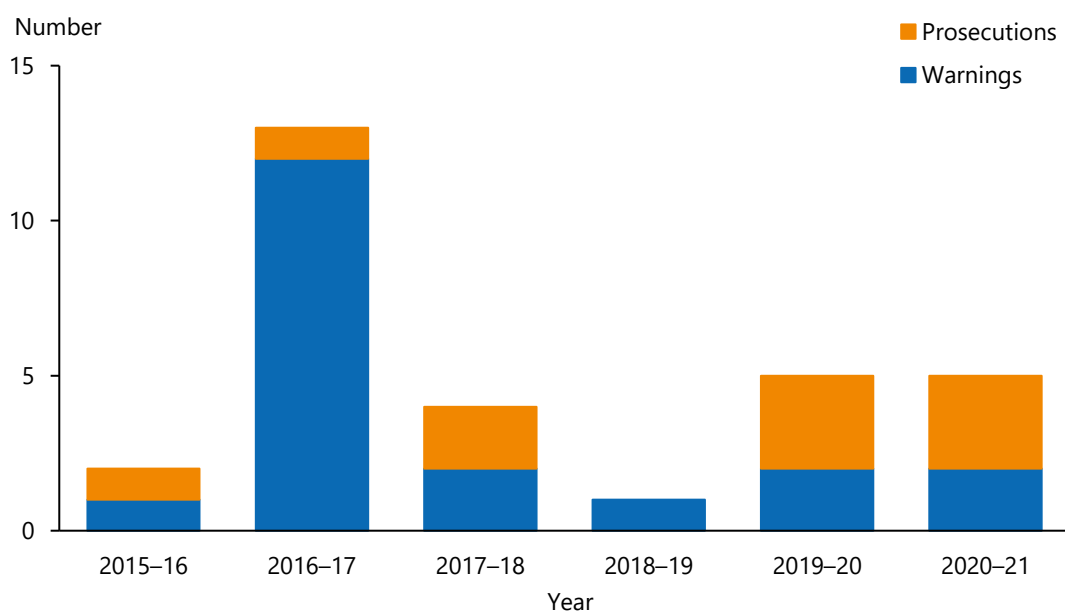
While Customs does not specifically target HPLPs, it does look for them in the mail stream and asks passengers about them as the passengers arrive at the border. There are no customs codes that allow HPLPs to be readily identified from import paperwork. The Ministry notifies Customs of all authorisations to import HPLPs and potential non-authorised importers.

# 5 Other agencies

## 5.1 New Zealand Police

Figure 5 records the New Zealand Police’s data on proceedings against offenders for breaches of the Summary Offences Act 1981 by being in possession of a HPLP in a public place without a reasonable excuse (see **Appendix: Background to the legislation behind the controls**).

**Figure 5: Number of proceedings against offenders for possessing high-power laser pointers in a public place, 2015–2021**

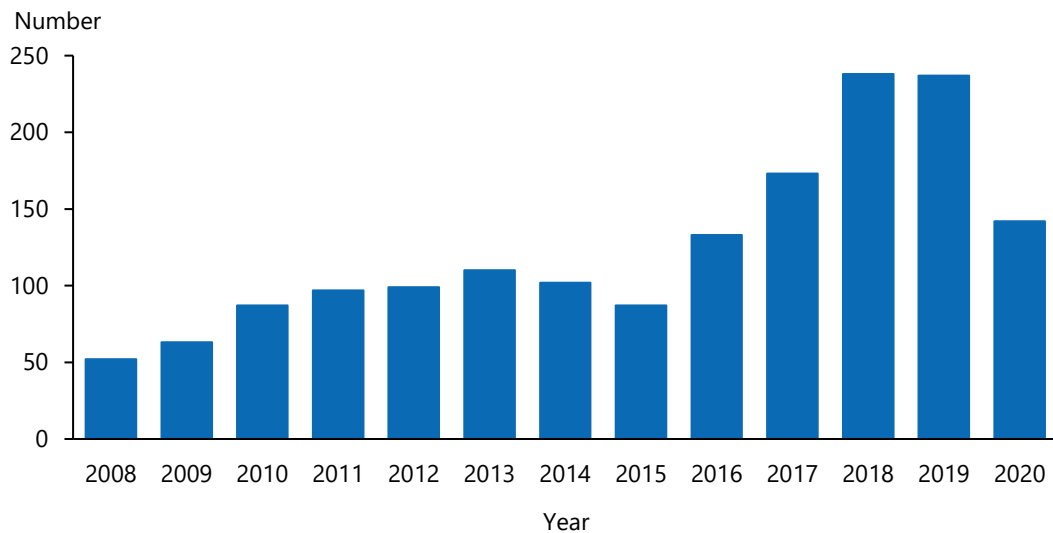


Academic staff at The University of Auckland test laser pointers at an evidential standard where required for a prosecution.

## 5.2 Civil Aviation Authority of New Zealand

The Civil Aviation Authority of New Zealand (CAA) reports the following data on laser strikes on aircraft in New Zealand since 2008.

**Figure 6: Number of reported laser strikes on aircraft, 2008–2020**



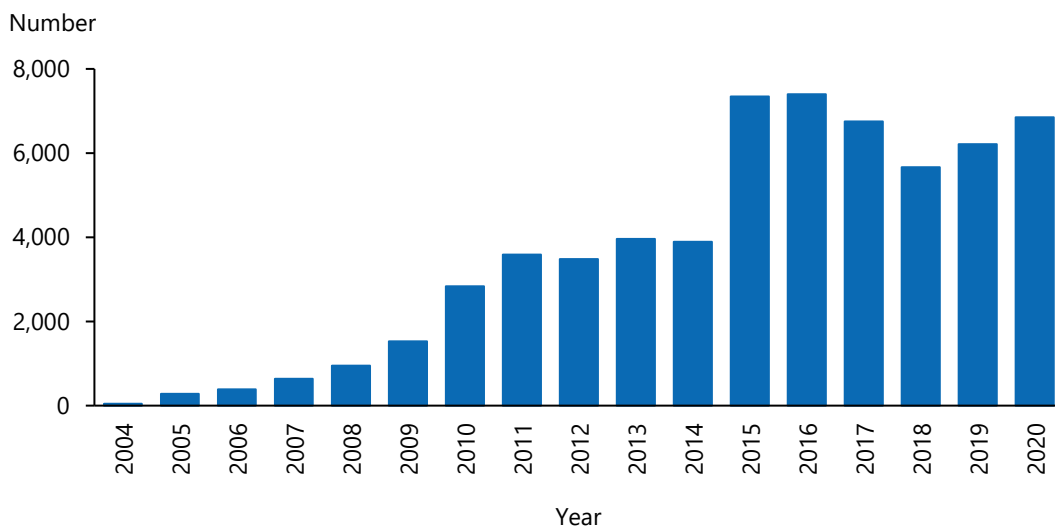
The figure shows that the number of incidents levelled off in 2019 and decreased in 2020. The decrease in 2020 can no doubt be attributed to restrictions on people's movements and the decreased numbers of flights due to the COVID-19 lockdowns.

# 6 Overseas developments

Some examples of controls introduced overseas were discussed in the previous report on the implementation of HPLP regulations. Health officials are not aware of further legislative controls introduced recently in other countries.

Data on aircraft laser strikes in the United States of America shows that, after a fall in the years 2017 and 2018, the number of strikes has increased again.

**Figure 7: Number of reported laser strikes on aircraft in the United States, 2004–2020**



# 7 Conclusions

The Ministry's implementation of the Health (High-power Laser Pointers) Regulations 2013 and the associated CIPO has continued smoothly. The work has not created a large burden for health officials and others involved.

The numbers of applications for authorisations increased over the past year. Advertising on Trade Me and the numbers of laser strikes on aircraft, however, both fell, probably as a result of COVID-19 restrictions. Advertising HPLPs of a power greater than that shown on the label, or with no power disclosed, continues to be a problem.

In the coming year, the Ministry will continue its surveillance of Trade Me and will conduct further discussions with Trade Me on possible additional controls, especially for overseas sellers.

The Ministry will also review conditions associated with authorisations in order to check their effectiveness and whether additional conditions might be necessary in order to promote safe use of more powerful HPLPs. Ministry officials will also carry out a review and audit of past authorisations to check on compliance.

The Ministry will arrange to meet with other agencies, including the Ministries of Transport and Justice, the CAA, New Zealand Customs and the New Zealand Police, to share and discuss this report.

# Appendix: Background to the legislation behind the controls

In December 2013, the New Zealand Government introduced new regulations to manage the health and safety risks from high-power laser pointers (HPLPs). These came into force on 1 March 2014.

- The Customs Import Prohibition (High-power Laser Pointers) Order 2019 (CIPO) restricts the importation of HPLPs to people authorised to import them by the Director-General of Health. The CIPO is made under section 96 of the Customs and Excise Act 2018 and administered by the New Zealand Customs Service.
- The Health (High-power Laser Pointers) Regulations 2013 restrict the sale/supply of HPLPs to authorised suppliers and restrict their acquisition to authorised recipients. They are made under sections 117(1)(a) and (z) and 119(d) of the Health Act 1956 and are administered by the Ministry of Health.

The regulatory controls do not ban laser pointers outright. They impose controls on the supply chain and require people to justify their need for a higher-power device (as opposed to a lower-power one).

The controls only apply to laser pointers with an output power of greater than 1 milliwatt (mW) and to devices that, in the Director-General of Health's opinion, are commonly known as laser pointers. Using this discretion, the Director-General of Health has determined that some types of device (for example, those used in surveying or those sold with fixtures for mounting on a firearm as a sighting aid) do not come within the scope of the regulations.

The regulations also automatically authorise classes of people who want to use laser pointers for certain purposes, such as members of astronomical societies and people who use laser pointers for industrial and research purposes. However, these people must still be able to provide proof that they belong to the exempt class if required; for example, when they are acquiring an HPLP. People in exempt classes must still obtain authorisation if they wish to import an HPLP.

In July 2014, the Government amended the Summary Offences Act 1981 to make it an offence to be in possession of an HPLP in a public place without a reasonable excuse. This legislation is administered by the Ministry of Justice and enforced by the New Zealand Police.