



# Surgery and risk in Aotearoa New Zealand

## Te pōkanga me te tūponotanga i Aotearoa

Ko tā tēnei pārongo whakairoiro he whakarāpopoto i ngā mōhiohio mō te poka i Aotearoa i 2021, tae atu ki ngā tūraru e pā ana ki te poka, Ko te poka whakarite (i āta whakaritea i mua) me te poka ohore (mō tētahi mate nonoi).



Hei whakamaumaharatanga mō Rob Vigor-Brown me ana mahi hei māngai kiritaki i te Komiti Arotake Mate Poka.

### I te tau 2021:



**5,122,600**

tāngata e noho ana ki Aotearoa nei



**197,916**

ngā poka mā te rongoā whakarehu\*



**99.2%**

o ngā tāngata ka ora tonu e 30 rā whaimuri i tā rātou poka

\*Ko ngā momo rongoā whakarehu kei ēnei tauanga he rehu whānui me te rehu tuaiwi. Rehu tuaiwi; i te wā o te rehu whānui, ka meatia ngā rongoā hei whakamoe i a koe, kia kūare koe, kia kaua e nekeneke e rongo mamae rānei i a koe e pokaina ana.<sup>1</sup> Rehu tuaiwi: ka werohia e te tākuta tētahi rehu whāiti huri noa i ngā ioio i te wāhi tuaiwi. Ko te rehu tuaiwi kei konei hoki te rehu timu, rehu aho tuaiwi.



Ko te tūponotanga e ora tonu ana te tangata whaimuri i tā rātou poka i te āhua tonu o ngā āhuatanga pērā i te nonoi me te matatini o tā rātou poka me te āhua o te māuiui. Ko ētahi atu āhuatanga ko tō rātou pakeketanga, te ira, te mātāwaka me ētahi āhua rongoā noa.

Mehemea e māuiui ana koe me mātua tere kōrero ki tō tākuta. He painga, he tūraru hoki ki ia poka. Mā tō tākuta koe e āwhina kia whakatau ina tika rānei te poka mōu.



HEALTH QUALITY & SAFETY  
COMMISSION NEW ZEALAND  
*Kupu Taurangi Hauora o Aotearoa*

**Te Kāwanatanga  
o Aotearoa**  
New Zealand Government

<sup>1</sup> General anaesthesia. URL: <https://www.nhs.uk/conditions/general-anaesthesia> (accessed 28 October 2022).



## He haumaruru atu te poka whakarite i te poka ohore



### Poka whakarite

He mea āta whakamahere te poka whakarite. Ka pai ake te kouno o te oranga o te tangata ka aukati rānei te momo mate kia kore e kino haere.

He tino iti te tūpono ka mate whaimuri i te poka whakarite.

#### I te tau 2021:

**133,397** poka whakarite

**310** ngā mate whai muri i te poka whakarite

**99.8%** o ngā tāngata e ora tonu ana e 30 rā whaimuri i tā rātou poka

### Poka ohore

Ko te poka ohore mō tētahi māiuiui nonoi. Ko te nuinga o te hunga poka ohore ka mate ina kore e pokaina.

He iti noa iho i te poka whakarite; i te tau 2021 ko te tahi poka o ngā poka e toru he mea ohore.

#### I te tau 2021:

**64,519** poka ohore

**1,200** ngā mate whaimuri i te poka ohore

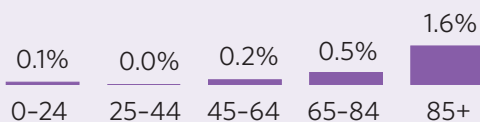
**98.1%** o ngā tāngata e ora tonu ana e 30 rā whaimuri i tā rātou poka

## He nui atu te tūraru mate mō ngā kaumātua

### Poka whakarite

He tino iti te tūraru mate whaimuri i te poka whakarite. He haumaruru ake te poka whakarite mō te hunga e tamariki iho ana.

Ko te ōrau o te hunga i mate o roto o te 30 rā o tā rātou poka whakarite.

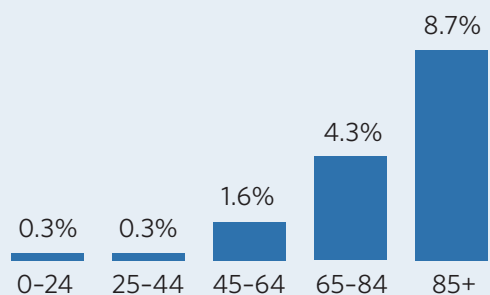


Te pakeketanga

### Poka ohore

Ka mahia te poka ohore hei whakaora i te tangata. He haumaruru ake te poka ohore mō te hunga e tamariki iho ana.

Ko te ōrau o te hunga i mate o roto o te 30 rā o tā rātou poka ohore.



Te pakeketanga

## He āhua teitei ake te tūraru mate mō ngā tāne whaimuri i te poka ohorere

Ka whakamāramatia tēnei mā ngā rerekētanga o ngā momo poka me ngā tikanga o ngā te take kia pokaina, pērā i ngā tāne ka nui atu ngā wharanga kikino.

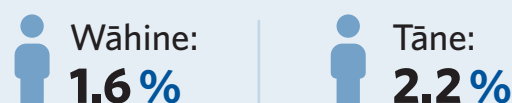
### Poka whakarite

Ko te ōrau o te hunga i mate o roto o te 30 rā o tā rātou poka whakarite:



### Poka ohorere

Ko te ōrau o te hunga i mate o roto o te 30 rā o tā rātou poka ohorere:



## He teitei ake ngā matenga o ngā Māori me ngā Pasifika i ērā atu mātāwaka whaimuri i te poka

Ko ngā tikanga e pērā ana ēnei mana taurite-kore he rerekē, he matatini. Pērā i te whai wāhi ki te tauwhiro tino pai rawa atu, te ohaori pakukore me te taumaha o te māuiui pūrua.<sup>2</sup>

### Poka whakarite

Ko te ōrau o te hunga i mate o roto o te 30 rā o tā rātou poka whakarite:

Iwi Māori	0.2%
Iwi Pasifika	0.3%
Iwi Āhia	0.1%
Iwi Pākehā/Mātāwaka	0.1%

### Poka ohorere

Ko te ōrau o te hunga i mate o roto o te 30 rā o tā rātou poka ohorere:

Iwi Māori	1.8%
Iwi Pasifika	1.6%
Iwi Āhia	1.1%
Iwi Pākehā/Mātāwaka	0.9%

Mō te whakataurite ā-ira, ā-mātāwaka kua whakaarohia te rerekētanga o te pakeketanga o ia rōpū.

<sup>2</sup> The Perioperative Mortality Review Committee has investigated the ethnic inequities in surgery death rates in its previous reports. See: <https://www.hqsc.govt.nz/our-work/mortality-review-committees/perioperative-mortality-review-committee>.

# Ko ngā poka whakarite noa



Kei tēnei whārangi ngā poka whakarite noa i waenga i ngā tau 2017 me 2021.

Ko te poka whakarite noa iho ko te poka hapūtanga, tērā e pā ana ki te whakawhānau pēpi. He tino haumarua ngā poka hapūtanga, ko te pāpātanga mate e iti iho i te 1 o te 10,000. I waenga i ngā tau 2017 me 2021 e 12,556 te toharite o ngā poka hapūtanga i ia tau. 1.2 te toharite o ngā tangata i mate o roto o te 30 rā o tā rātou poka hapūtanga.

## Poka hapūtanga

Tauira: Whānau poka whakarite me ngā tukanga mō ngā wāhine whaimuri i te whakawhānautanga

Toharite ā-tau:

 **12,556** poka

Iti iho i te **0.1%** | e **1** tangata i mate o roto o te 30 rā

## Poka kōpū

Te tango pūtautau i te kōpū, te tango i te kōpū katoa

Toharite ā-tau:

 **9,474** poka

Iti iho i te **0.1%** | e **2** tangata i mate o roto o te 30 rā

## Poka turi

Tauira: Mātai turi me te tango mata kōpapa

Toharite ā-tau:

 **7,251** poka

**0.1%** | e **7** tangata i mate o roto o te 30 rā

## Poka papatoiake, hope, wheua kūhā

Tauira: Whakahou hope

Toharite ā-tau:

 **6,234** poka

**0.3%** | e **19** tangata i mate o roto o te 30 rā

## Poka korokoro, pūreke/pūtautau waitinana

Tauira: Te tango pūreke, tango pūtautau waitinana rānei

Toharite ā-tau:

 **6,187** poka

Iti iho i te **0.1%** | e **1** tangata i mate o roto o te 30 rā

## Whakatika whaturama

Tauira: Whakatika whaturama kōpiro iti, pito rānei

Toharite ā-tau:

 **5,879** poka

Iti iho i te **0.1%** | e **3** tangata i mate o roto o te 30 rā

## Kōiwi whānui

Tauira: Unuhia pokenga, hanga tautoko, whakatika uaua, iohere

Toharite ā-tau:

 **4,616** poka

**0.1%** | e **5** tangata i mate o roto o te 30 rā

## Poka ū

Tauira: Maimoatanga, (hae me te mimiti) o ngā whēwhē ū

Toharite ā-tau:

 **4,411** poka

Iti iho i te **0.1%** | e **1** tangata i mate o roto o te 30 rā

## Poka kumu

Tauira: Tangohia tero puta

Toharite ā-tau:

 **4,261** poka

**0.2%** | e **10** tangata i mate o roto o te 30 rā

# Ko ngā poka whakarite nui te tūraru



Kei tēnei whārangi ngā poka whakarite nui ngā pāpātanga mate i waenga i ngā tau 2017 me 2021.

He teitei ake ngā pāpātanga mate o ētahi poka i ētahi atu. Ko te poka whakarite e teitei ake te tūraru ko te poka pūtahi o te manawa. I waenga i ngā tau 2017 me 2021 136 te toharite o ngā poka pūtahi manawa i ia tau, ko te toharite anō tokowaru ngā tāngata (6 ōrau) i mate o roto o te 30 rā o tēnei poka. Ko te tūraru mate whaimuri i te poka pūtahi manawa e iti iho ina kāore te poka e mahia.

## Poka pūtahi manawa

Tauira: Te whakatika, te whākapi rānei i te pūtahi manawa

Toharite ā-tau:

 **136** poka

**6.0%** | e **8** tangata  
i mate o roto o te 30 rā

## Poka tariwai/whakatika ia-toto (kaua ko te pūtahi manawa)

Te maimoatanga o tētahi pupuhi rerekē o tētahi ia-tuku i te kakī, i ngā kaupeka

Toharite ā-tau:

 **162** poka

**3.0%** | e **5** tangata  
i mate o roto o te 30 rā

## Whakawhiti tākihi, pūkahukahu rānei

Tauira: Whakawhiti tākihi, pūkahilahu rānei

Toharite ā-tau:

 **217** poka

**2.8%** | e **6** tangata  
i mate o roto o te 30 rā

## Poka pūio mō ngā puku ia-toto

Tauira: Huraina te angaanga hei maimoa i tētahi pūio roro (puku noa o tētahi ia-tuku)

Toharite ā-tau:

 **152** poka

**2.6%** | e **4** tangata  
i mate o roto o te 30 rā

## Poka ia-tuku-autaki tariwai

Tauira: He ia-tuku-autaki o ngā ia-tuku i ngā waewae

Toharite ā-tau:

 **259** poka

**2.2%** | e **6** tangata  
i mate o roto o te 30 rā

## He uwahi ia-tuku autaki

Tauira: Whākapi o tētahi uwahi he ara autaki i tētahi ia-tuku purutiti e rere atu te toto ki te uaua manawa

Toharite ā-tau:

 **824** poka

**2.0%** | e **17** tangata  
i mate o roto o te 30 rā

## Poka manawa (kaua ko te ia-tuku-autaki)

Tauira: Whakatika, whākapi rānei i tētahi takirere manawa

Toharite ā-tau:

 **1,536** poka

**1.9%** | e **30** tangata  
i mate o roto o te 30 rā

## Poka pūio mō ngā pukupuku roro

Tauira: Huraina te angaanga kia tangohia ngā pukupuku roro

Toharite ā-tau:

 **839** poka

**1.7%** | e **14** tangata  
i mate o roto o te 30 rā

## Poka repe taiaki huka

Tauira: Tangohia tētahi wāhanga te katoa rānei o te repe taiaki huka

Toharite ā-tau:

 **227** poka

**1.4%** | e **3** tangata  
i mate o roto o te 30 rā

# Ko ngā poka ohore noa




Kei tēnei whārangi ngā poka ohore noa i waenga i ngā tau 2017 me 2021.

Ka mahia te poka ohore hei whakaora i te tangata. Ko te poka ohore noa ko te poka kōpiro nui. I waenga i ngā tau 2017 me 2021 e 6,712 te toharite o ngā poka kōpiro nui i ia tau. E 63 tāngata (0.9 ōrau) te toharite i mate i ia tau o roto o te 30 rā o tā rātou poka.

## Poka kōpiro nui

Tauira: Tangohia tētahi wāhanga o te kōpiro nui

Toharite ā-tau:

 **6,712** poka

**0.9%** | e **63** tangata  
i mate o roto o te 30 rā

## Poka papatoiake whara, hope wheua kūhā rānei

Tauira: Whakatika papatoiake whara, wheua kūhā rānei

Toharite ā-tau:

 **5,941** poka

**5.7%** | e **336** tangata  
i mate o roto o te 30 rā

## Poka ahuhahu

Tauira: Whakatika i ngā taotū kiri, iohere o ngā ringa, maimoa pūkākā

Toharite ā-tau:

 **5,707** poka

**0.3%** | e **14** tangata  
i mate o roto o te 30 rā

## Poka kōiwi whānui

Tauira: Tangohia he pokenga, hanga tautoko, whakatika uaua, ioher

Toharite ā-tau:

 **3,506** poka

**0.9%** | e **31** tangata  
i mate o roto o te 30 rā

## Poka whatiānga raparapa

Tauira: Poka whatiānga raparapa whati, waewae rānei

Toharite ā-tau:

 **3,439** poka

**0.3%** | e **9** tangata  
i mate o roto o te 30 rā

## Poka kouawai, ara waiate

Tauira: Tangohia te kouawai

Toharite ā-tau:

 **3,427** poka

**1.1%** | e **38** tangata  
i mate o roto o te 30 rā

## Poka kikowhiti whati

Tauira: Whakatika, raweke rānei i te kikowhiti whati

Toharite ā-tau:

 **2,285** poka

**0.1%** | e **2** tangata  
i mate o roto o te 30 rā

## Poka kumu

Tauira: Maimoa pokenga (whēwhē) o te kumu

Toharite ā-tau:

 **2,163** poka

**1.0%** | e **23** tangata  
i mate o roto o te 30 rā

## Poka hapūtanga

Tauira: Te whānau poka ohore, tukanga wāhine whaimuri i te whakawhānau

Toharite ā-tau:

 **1,939** poka

Iti iho i te **0.1%** | Iti iho i 1 tangata  
i mate o roto o te 30 rā

# Poka ohore nui te tūraru



Kei tēnei whārangi ngā poka ohore nui te tūraru i waenga i ngā tau 2017 me 2021.

Ka mahia te poka ohore hei whakaora i te tangata. Ko te poka ohore nui te tūraru ko te poka pūtahi manawa. I waenga i ngā tau 2017 me 2021 e 101 te toharite o ngā poka pūtahi manawa i ia tau. E 22 tāngata (22 ōrau) te toharite i mate i ia tau o roto o te 30 rā o tā rātou poka.

## Poka pūtahi manawa

Tauira: Whakatika, whākapi rānei i te pūtahi manawa

Toharite ā-tau:

 **101** poka

**22%** | e **22** tangata  
i mate o roto o te 30 rā

## Poka tariwai/whakatika ia-toto (kaua ko te pūtahi manawa)

Te maimoatanga o tētahi pupuhi rerekē o tētahi ia-tuku i te kaki, i ngā kaupeka

Toharite ā-tau:

 **108** poka

**19%** | e **21** tangata  
i mate o roto o te 30 rā

## Poka whēkau

Tauira: Poka nui i ngā whēkau o te puku, whaimuri, arā, i te whara kino (ngaukino) he pokenga rānei

Toharite ā-tau:

 **146** poka

**17%** | e **25** tangata  
i mate o roto o te 30 rā

## Poka pūio roro

Tauira: Huraina te angaanga kia maimoa i te pūio roro (pupuhi rerekē o te ia-tuku)

Toharite ā-tau:

 **243** poka

**14%** | e **33** tangata  
i mate o roto o te 30 rā

## Poka puku

Tauira: Tangohia he wāhanga puku nā te rere noa o te toto mai i ngā keha, mate pukupuku

Toharite ā-tau:

 **399** poka

**7.9%** | e **31** tangata  
i mate o roto o te 30 rā

## Poka pūio mō ngā pukupuku roro

Tauira: Huraina te angaanga kia tangohia ngā pukupuku roro

Toharite ā-tau:

 **1,001** poka

**7.5%** | e **75** tangata  
i mate o roto o te 30 rā

## Poka manawa (kaua ko te uwahi ia-tuku autaki)

Tauira: Mimiti i te wai nui rawa o te manawa, whakatika, whākapi takirere manawa rānei

Toharite ā-tau:

 **397** poka

**6.8%** | e **27** tangata  
i mate o roto o te 30 rā

## Poka kōpiro iti

Tauira: Tangohia tētahi wāhanga o te kōpiro iti

Toharite ā-tau:

 **989** poka

**6.4%** | e **63** tangata  
i mate o roto o te 30 rā

## Poka tariwai kia huaki ia-tuku purutiti o raro o ngā waewae

Tauira: Poka tariwai mō ngā puru ia-tuku o raro o ngā waewae

Toharite ā-tau:

 **388** poka

**6.4%** | e **25** tangata  
i mate o roto o te 30 rā

## About the Perioperative Mortality Review Committee | Mō te komiti

He kaitohutohu motuhake te komiti ki a Kupu Taurangi Hauora o Aotearoa. Ka tohutohu i te Komihana mō te pēhea e whakaiti iho i ngā matenga poka i Aotearoa.

Ka kitea ngā Paearu mahi o te Komiti ki konei: <https://www.hqsc.govt.nz/our-work/mortality-review-committees/perioperative-mortality-review-committee/about-us/terms-of-reference>.

## Useful resources | Ngā rauemi papai

**Healthline, mō ngā tohutohu hauora whānui:**  
<https://www.healthline.govt.nz>

**Me whakamahere i tō toronga haumanu hauora:**  
<https://www.hqsc.govt.nz/resources/resource-library/lets-plan-for-your-next-health-care-visit>

**He aha koia te rongoā whakarehu?:**  
<https://www.anzca.edu.au/patient-information/anaesthesia-information-for-patients-and-carers>

**Kia mataara mō te poka/hāparapara:**  
<https://www.healthnavigator.org.nz/health-a-z/s/surgery-preparing>

**Me whakamahere i te wehenga i te hōhipera:**  
<https://www.hqsc.govt.nz/resources/resource-library/lets-plan-to-leave-hospital>

## How we calculated the data | Te tātari raraunga

I tēnei tuhinga ko te poka he whakauru hōhipera e whakamahia nei he rehu whānui, he rehu tuaiwi rānei. Ko ngā hōhipera whai tahua tūmatanui anake kei tēnei tauākī.

Ko ngā poka tino tūraru rawa atu ka kite anake ngā poka e neke atu i te 500 i mahia i waenga i ngā tau 2017 me 2021.<sup>3</sup>

Nā te mea e haumarua ake ana te poka mō te hunga tamariki iho i meatia e mātou he paerewa pakeketanga kia raweke i te tohatoha pakeke o ngā rōpū rerekē. Hei whakataurite te tāne i te wahine i hāngai tā mātou whakataurite ki te tohatoha poka (ngā mātāwaka katoa) i te tau 2021.

<sup>3</sup> We followed the methodology of Gurney JK, McLeod M, Stanley J, et al. 2020. Postoperative mortality in New Zealand following general anaesthetic: demographic patterns and temporal trends. *BMJ Open* 10: e036451. DOI: 10.1136/bmjopen-2019-036451. We used a modified version of surgery groupings from Campbell D, Boyle L, Soakell-Ho M, et al. 2019. National risk prediction model for perioperative mortality in non-cardiac surgery. *British Journal of Surgery* 106: 1549–57. DOI: 10.1002/bjs.11232

Hei whakataurite i ngā mātāwaka rerekē i meatia e mātou te tohatoha pakeketanga o ngā poka katoa mō te Māori i te tau 2021.<sup>4</sup> I tēnei tuhinga kua meatia e mātou te 'whakaarotau mātāwaka' tērā e mahia noatia i te rāngai hauora. Ko te whakaarotau mātāwaka ka tohua te tangata ki tētahi rōpū mātāwaka anake.<sup>5</sup> Mā tēnei tukanga ka noho ko te Māori hei whakaarotau matua, whaimuri ko ngā iwi Pasifika, iwi Āhia me ētahi atu rōpū māatāwaka, kātahi ko te iwi Pākehā. Ko te tikanga inā tohua e tētahi tangata hei Māori, hei Pasifika hoki ka tukua ia ki te rōpū Māori. Ina tohua hei Pasifika me te Pākehā ka tukua ia ki te rōpū Pasifika. Me te aha, ko tō te tangata whakaarotau mātāwaka e kore pea e whakaatu i te tuakiri mātāwaka e hiahiaatia ana e rātou.

<sup>4</sup> Gurney JK, McLeod M, Stanley J, et al. 2022. Regional variation in post-operative mortality in New Zealand. *ANZ Journal of Surgery* 92: 1015–25. DOI: 10.1111/ans.17510.

<sup>5</sup> Ministry of Health. 2017. HISO 10001:2017 Ethnicity Data Protocols. Wellington: Ministry of Health. URL: <https://www.health.govt.nz/publication/hiso-100012017-ethnicity-data-protocols> (accessed 9 August 2022).

Me kōrero ki tō tūngaio hauora mō te kōrero e hāngai pū ana ki a koe.  
Mō ētahi atu tohutohu whānui me waea atu ki Healthline: 0800 611 116

Ka whakahoungia ā-tautia tēnei mōhiohio.  
I whakahoungia i te marama o Hakihea o te tau 2022.

Whakaputaina mai i te marama o Hakihea 2022 e te Kupu Taurangi Hauora o Aotearoa, Pouaka 25496, Te Whanganui-a-Tara 6146, Aotearoa.  
Īmēra: [info@hqsc.govt.nz](mailto:info@hqsc.govt.nz)  
Pae ipurangi: [www.hqsc.govt.nz](http://www.hqsc.govt.nz)