



# Atlas of Healthcare Variation: Methodology Opioids

November 2025



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- Ms Mary-Anne O'Rourke
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- Ms Leanne Te Karu
- Dr Gary Jackson
- Ms Beth Loe
- Mr Chris James

## General points

- Data is not presented where the number of people in the numerator was less than 10. This is to preserve confidentiality.
- People were assigned to their Health New Zealand Te Whatu Ora district (previously referred to as Health New Zealand District Health Board; DHB) of domicile; where more than one domicile was recorded in the calendar year, the most recent value was selected.
- Age group is assigned using 30 June of each calendar year as the cutoff point. For example, a person turning 65 years old on 30 June 2023 will be assigned to the 65–79 years age group for 2023, while a person turning 65 on 1 July 2023 will be assigned the 25–64 group for the same year.
- Ethnic group data presented is prioritised ethnic group (Māori, Pacific peoples, Asian and European/Other).
- Unlike other atlases, the Opioid Atlas includes individuals who died during the calendar year in all indicators. This is because opioid use is higher among older adults and those in the final stages of life, due to chronic conditions, pain management, and palliative care needs. Including them ensures a complete and accurate picture of opioid exposure.
- For PHO analyses, we analysed indicator #1 to determine number of people who were dispensed a strong opioid among each PHO. Then we categorised them into small (<1,000 people), medium (between 1,000 and 2,000), medium-large (between 2,000 and 5,000) and large (>5,000 people).
- Please note the following PHOs were combined in the Atlas, this was done where PHOs had changed entities, or where there were regional subsidiaries with enrolled populations that were too small to report separately.

Recorded PHO name	Atlas reporting PHO name
Alliance Health Plus Trust	Included in The Cause Collective
Comprehensive Care PHO - Northland	Included with Comprehensive Care PHO Limited
National Hauora Coalition - Northland	Included with National Hauora Coalition
ProCare Health (PHO) Limited - Northland	Included with ProCare Health (PHO) Limited

## Data sources

- National minimum dataset (NMDS), Health New Zealand.
- Primary Health Organisation (PHO) Enrolment Collection, Health New Zealand.
- Pharmaceutical Collection, Health New Zealand.
- National Non-Admitted Patient Collection (NNPAC), Health New Zealand.

- All information on demographics were obtained from the NHI database, Health New Zealand.

## Exclusions

People who were excluded from the analysis were:

- individuals with missing demographics– that is, those with no recorded value for one or more of the National Health Index (NHI) fields used to derive the demographic variables of interest (age, gender, ethnicity and district of domicile). For instance, a person with no recorded ethnicity in 2023 is excluded from all indicators for that calendar year. This approach ensures a consistent denominator throughout the analyses.
- those who weren't enrolled in a PHO in the calendar year.

### Confidence intervals

We present indicator data as a percentage or rate per 1,000, calculated for each Health New Zealand district. We use 95% confidence intervals to understand the range of likely values for each result. Each result is compared to the overall New Zealand rate for the same indicator.

Comparing two confidence intervals is a quick heuristic method to determine whether there is a statistically significant difference between rates. If the confidence intervals don't overlap, the difference can be considered significant at the 0.05 level. If they do overlap, the difference may or may not be significant at the 0.05 level.

- If the district's upper limit is below New Zealand's lower limit, we say the district's result is "Significantly lower."
- If the district's lower limit is above New Zealand's upper limit, we say the result is "Significantly higher."
- If the confidence intervals overlap, we say the result is "Not significantly different."

The same method is used for comparisons between demographic groups and time points in key findings on the [Atlas of healthcare variation/opioids - hqsc.govt.nz](https://atlas.hqsc.govt.nz/)

Note that this method is a conservative test of statistical significance; results with overlapping confidence intervals may still be significantly different at the 0.05 level if a formal statistical test is undertaken.

## Indicators

### 1. People dispensed a strong opioid medicine one or more times in a year

<b>Indicator #1:</b>	People dispensed one or more strong opioid medicines in a year
<b>Numerator</b>	PHO-enrolled population who were dispensed a strong opioid: morphine, fentanyl, methadone (excluding those using for substance abuse), oxycodone and pethidine during the calendar year
<b>Denominator</b>	PHO-enrolled population during the calendar year
<b>Data source</b>	Pharmaceutical Collection, PHO Enrolment Collection

<b>Analysis</b>	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
<b>Exclusions</b>	<p>Opioid substitution treatment was excluded by identifying people who had methadone dispensed every one, two or three days. People who met this criterion were excluded from further analysis. Note that individuals are excluded if they were dispensed methadone in this pattern at any time prior to or during the year of interest. This method may incorrectly exclude people who had this pattern of dispensing for a different reason, however, a comparison between the number of people registered with the Ministry of Health as receiving opioid substitution treatment and the number of people excluded suggests this method is sufficiently accurate.</p>
<b>Medication</b>	<p>1274 Fentanyl citrate; 1795 Methadone hydrochloride; 1830 Morphine hydrochloride; 1831 Morphine sulphate; 2383 Morphine tartrate; 3801 Fentanyl; 3822 Oxycodone hydrochloride; 3896 Fentanyl citrate; 1953 Pethidine hydrochloride</p>
<b>Commentary</b>	<p>Description: People dispensed one or more strong opioid medicines in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had a strong opioid dispensed to them by a community pharmacy, by year (2019 to 2023), ethnic group, age group and gender.</p> <p>A ‘strong’ opioid is classed as step 3 of the World Health Organization’s (WHO) analgesic ladder. This includes fentanyl, methadone, morphine, oxycodone and pethidine. These opioids are subsidised in New Zealand.</p> <p>Methadone for opioid substitution treatment was excluded from this indicator by removing records of dispensed methadone within three days of the previous dispensing.</p> <p><b>Why this indicator is important</b></p> <p>The Institute for Healthcare Improvement (IHI) classifies opioids as one of four groups of medicines (along with anticoagulants, insulin and sedatives) that can cause harm to patients, even when used as intended.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> <li>• Why are there marked ethnic differences in the use of strong opioids?</li> </ul>

	<ul style="list-style-type: none"> <li>How does increased strong opioid use relate to waiting times for elective surgeries? Would this explain district variation?</li> </ul>
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## 2. People dispensed a ‘strong’ opioid for 6 weeks or more in a year

<b>Indicator #2:</b>	People dispensed a ‘strong’ opioid for 6 weeks or more in a year
<b>Numerator</b>	PHO-enrolled population who were dispensed a strong opioid for 6–12 weeks after the first dispensing during the calendar year
<b>Denominator</b>	PHO-enrolled population during the calendar year
<b>Data source</b>	Pharmaceutical Collection, PHO Enrolment Collection
<b>Analysis</b>	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
<b>Inclusions</b>	<p>Date between first dispensing in a year and any subsequent dispensing to be greater than or equal to six weeks and not more than 12 weeks.</p> <p>Only dispensings in the same calendar year were included. The year was truncated at mid-November, ie, first dispensings from mid-November to 31 December were excluded as they would not meet the criteria of a subsequent dispensing 6–12 weeks after the first.</p>
<b>Exclusions</b>	Opioid substitution treatment was excluded by identifying people dispensed methadone every first, second or third day.
<b>Medication</b>	1274 Fentanyl citrate; 1795 Methadone hydrochloride; 1830 Morphine hydrochloride; 1831 Morphine sulphate; 2383 Morphine tartrate; 3801 Fentanyl; 3822 Oxycodone hydrochloride; 3896 Fentanyl citrate; 1953 Pethidine hydrochloride
<b>Commentary</b>	<p>Description: People dispensed a strong opioid for 6 weeks or more in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had a strong opioid dispensed to them by a community pharmacy over six weeks or more, between 2019 and 2023.</p> <p>To ensure that continuous use was captured, we included strong opioids that were dispensed within 6 to 12 weeks in the same calendar year. This means the year is truncated at mid-November; so the first time a strong opioid was dispensed after mid-November is not included.</p>

	<p>A ‘strong’ opioid is classed as step 3 of the World Health Organization’s (WHO) analgesic ladder. This includes fentanyl, methadone, morphine, oxycodone and pethidine. These opioids are subsidised in New Zealand.</p> <p>Methadone for opioid substitution treatment was excluded from this indicator by removing records dispensed methadone within three days of the previous dispensing.</p> <p><b>Why this indicator is important</b></p> <p>The Institute for Healthcare Improvement (IHI) classifies opioids as one of four groups of medicines (along with anticoagulants, insulin and sedatives) that can cause harm to patients, even when used as intended. Except in some circumstances, strong opioids are intended for short-term use only, with use for six weeks or more raising questions of appropriateness.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> <li>• Why are there marked ethnic differences in the use of strong opioids?</li> <li>• How does increased strong opioid use relate to waiting times for elective surgeries? Would this explain district variation?</li> </ul>
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### 3. People dispensed weak opioid medicines one or more times in a year

<b>Indicator #3:</b>	People dispensed one or more weak opioid medicines in a year
<b>Numerator</b>	PHO-enrolled population who were dispensed a weak opiate during the calendar year
<b>Denominator</b>	PHO-enrolled population during the calendar year
<b>Data source</b>	Pharmaceutical Collection, PHO Enrolment Collection
<b>Analysis</b>	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
<b>Medication</b>	1229 Tramadol; 1332 Codeine phosphate; 2427 Dihydrocodeine tartrate; 3906 Tramadol hydrochloride
<b>Exclusions</b>	Paracetamol with codeine was excluded on the basis that it contains a

	much lower dose of codeine.
<b>Commentary</b>	<p>Description: People dispensed one or more weak opioid medicines in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO enrolled population who had a weak opioid (tramadol or codeine and dihydrocodeine) dispensed to them by a community pharmacy, by year (2019 to 2023), ethnic group, age group, gender.</p> <p>A 'weak' opioid is classed as step 2 of WHO's analgesic ladder. This includes tramadol, codeine and dihydrocodeine. These opioids are subsidised in New Zealand. Paracetamol with codeine was excluded.</p> <p><b>Why this indicator is important</b></p> <p>The IHI classifies opioids as one of four groups of medicines (along with anticoagulants, insulin and sedatives) that can cause harm to patients, even when used as intended. As with strong opioids, continuous use of a weak opioid for six weeks or more raises questions on appropriateness of use.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> <li>• Looking at local data, how many people receive a weak opioid for six or more weeks?</li> </ul>

### 3a. People dispensed tramadol one or more times in a year

<b>Indicator #3a:</b>	People dispensed tramadol one or more times in a year
<b>Numerator</b>	PHO-enrolled population who were dispensed tramadol during the calendar year
<b>Denominator</b>	PHO-enrolled population during the calendar year
<b>Data source</b>	Pharmaceutical Collection, PHO Enrolment Collection
<b>Analysis</b>	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>



<b>Medication</b>	1229 Tramadol; 3906 Tramadol hydrochloride
<b>Commentary</b>	<p>Description: People dispensed tramadol one or more times in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had tramadol dispensed to them by a community pharmacy, by year (2019 to 2023), ethnic group, age group, gender.</p> <p>Note: A 'weak' opioid is classed as step 2 of WHO's analgesic ladder. This includes tramadol, which is subsidised in New Zealand. Paracetamol with codeine was excluded.</p> <p><b>Why this indicator is important</b></p> <p>The IHI classifies opioids as one of four groups of medicines (along with anticoagulants, insulin and sedatives) that can cause harm to patients, even when used as intended. As with strong opioids, continuous use of a weak opioid for six weeks or more raises questions on appropriateness of use.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> <li>• Looking at local data, how many people receive a tramadol for six or more weeks?</li> </ul>

### 3b. People dispensed codeine one or more times in a year

Indicator #3b:	People dispensed codeine one or more times in a year
Numerator	PHO-enrolled population who were dispensed codeine during the calendar year
Denominator	PHO-enrolled population during the calendar year
Data source	Pharmaceutical Collection, PHO Enrolment Collection
Analysis	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
Medication	1332 Codeine phosphate; 2427 Dihydrocodeine tartrate
Comment	Paracetamol with codeine was excluded on the basis that these contain

	a much lower dose of codeine.
Commentary	<p>Description: People dispensed codeine one or more times in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had dispensed codeine and dihydrocodeine to them by a community pharmacy, by year (2019 to 2023), ethnic group, age group, gender.</p> <p>Note: A weak opioid is classed as step 2 of the WHO analgesic ladder. This includes codeine and dihydrocodeine, which is subsidised in New Zealand. Paracetamol with codeine was excluded.</p> <p><b>Why this indicator is important</b></p> <p>The IHI classes opioids as one of four groups of medicines (along with anticoagulants, insulin and sedatives) that can cause harm to patients, even when used as intended. As with strong opioids, continuous use of a weak opioid for six weeks or more raises questions on appropriateness of use.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> <li>• Looking at local data, how many people receive a codeine for six or more weeks?</li> </ul>

#### 4. People dispensed morphine one or more times in a year

<b>Indicator #4:</b>	People dispensed morphine one or more times in a year
<b>Numerator</b>	PHO-enrolled population who were dispensed morphine during the calendar year
<b>Denominator</b>	PHO-enrolled population during the calendar year
<b>Data source</b>	Pharmaceutical Collection, PHO Enrolment Collection
<b>Analysis</b>	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>

<b>Medication</b>	1830 Morphine hydrochloride; 1831 Morphine sulphate; 2383 Morphine tartrate
<b>Commentary</b>	<p>Description: People dispensed morphine one or more times in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had morphine dispensed to them by a community pharmacy, by year (2019 to 2023), ethnic group, age group, and gender.</p> <p><b>Why this indicator is important</b></p> <p>Morphine is a strong opiate that is considered ‘gold standard’ treatment for severe acute pain, particularly in the palliative care setting. NICE recommends that morphine should not be used for neuropathic pain without specialist assessment.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> <li>• How long are people receiving morphine for?</li> </ul>

## 5. People dispensed morphine for 6 weeks or more

<b>Indicator #5:</b>	People dispensed morphine for 6 weeks or more
<b>Numerator</b>	PHO-enrolled population who were dispensed morphine for 6–12 weeks following first dispensing in a year
<b>Denominator</b>	PHO-enrolled population during the calendar year
<b>Data source</b>	Pharmaceutical Collection, PHO Enrolment Collection
<b>Analysis</b>	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
<b>Medication</b>	1830 Morphine hydrochloride; 1831 Morphine sulphate; 2383 Morphine tartrate
<b>Inclusions</b>	<p>Date between first dispensing in year and any subsequent dispensing to be greater than or equal to six weeks but not more than 12 weeks.</p> <p>Only dispensings in the same calendar year were included. The year was truncated at mid-November, ie, first dispensings from mid-November to 31</p>

	December were excluded as they would not meet the criteria of a subsequent dispensing 6–12 weeks after the first.
<b>Commentary</b>	<p>Description: People dispensed morphine for 6 weeks or more in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had morphine dispensed to them by a community pharmacy for six weeks or more, between 2019 and 2023.</p> <p>To ensure that continuous use was captured, we included morphine that was dispensed within 6 to 12 weeks in the same calendar year. This means the year is truncated at mid-November; so the first time a strong opioid was dispensed after mid-November is not included</p> <p><b>Why this indicator is important</b></p> <p>The IHI classes opioids as one of four groups of medicines (along with anticoagulants, insulin and sedatives) that can cause harm to patients, even when used as intended. Except in some circumstances, morphine is intended for short-term use only, with use for six weeks or more raising questions of appropriateness.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> </ul>

## 6. People dispensed oxycodone one or more times in a year

<b>Indicator #6:</b>	People dispensed oxycodone one or more times in a year
<b>Numerator</b>	PHO-enrolled population who were dispensed oxycodone during the calendar year
<b>Denominator</b>	PHO-enrolled population during the calendar year
<b>Data source</b>	Pharmaceutical Collection, PHO Enrolment Collection
<b>Analysis</b>	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
<b>Medication</b>	3822 Oxycodone hydrochloride
<b>Commentary</b>	Description: People dispensed oxycodone one or more times in a year.

	<p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had oxycodone dispensed to them by a community pharmacy, by year (2019 to 2023), ethnic group, age group, and gender.</p> <p><b>Why this indicator is important</b></p> <p>In palliative care, oxycodone is recommended as second-line treatment for people who cannot tolerate morphine. NICE recommends that oxycodone should not be used for neuropathic pain without specialist assessment. A <a href="#">bpac<sup>nz</sup> review</a> noted that oxycodone is more addictive than morphine and does not have a better side-effect profile.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> <li>• How long are people receiving oxycodone for?</li> </ul>
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## 7. People dispensed oxycodone for 6 weeks or more

<b>Indicator #7:</b>	People dispensed oxycodone for 6 weeks or more
<b>Numerator</b>	PHO-enrolled population who were dispensed oxycodone for 6–12 weeks after first dispensing in a year
<b>Denominator</b>	PHO-enrolled population during the calendar year
<b>Data source</b>	Pharmaceutical Collection, PHO Enrolment Collection
<b>Analysis</b>	<p>District analysis: By year (2019–2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
<b>Medication</b>	3822 Oxycodone hydrochloride
<b>Inclusions</b>	<p>Date between first dispensing in year and any subsequent dispensing to be greater than or equal to six weeks but not more than 12 weeks.</p> <p>Only dispensings in the same calendar year were included. The year was truncated at mid-November, ie, first dispensings from mid-November to 31 December were excluded as they would not meet the criteria of a subsequent dispensing 6–12 weeks after the first.</p>

<b>Commentary</b>	<p>Description: People dispensed oxycodone for 6 weeks or more in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had who had oxycodone dispensed to them by a community pharmacy for six weeks or between 2019 and 2023.</p> <p>To ensure that continuous use was captured, we included oxycodone that was dispensed within 6 to 12 weeks in the same calendar year. This means the year is truncated at mid-November; so the first time a strong opioid was dispensed after mid-November is not included.</p> <p><b>Why this indicator is important</b></p> <p>The IHI classes opioids as one of four groups of medicines (along with anticoagulants, insulin and sedatives) that can cause harm to patients, even when used as intended. Except in some circumstances, oxycodone is intended for short-term use only, with use for six weeks or more raising questions of appropriateness.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> </ul>
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## 8. People dispensed fentanyl one or more times in a year

Indicator #8:	People dispensed fentanyl one or more times in a year
Numerator	PHO-enrolled population who were dispensed fentanyl during the calendar year
Denominator	PHO-enrolled population during the calendar year
Data source	Pharmaceutical Collection, PHO Enrolment Collection
Analysis	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
Medication	1274 Fentanyl citrate; 3801 Fentanyl; 3896 Fentanyl citrate
Commentary	<p>Description: People dispensed fentanyl one or more times in a year.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had fentanyl dispensed to them by a community pharmacy,</p>

	<p>by year (2019 to 2023).</p> <p><b>Why this indicator is important</b></p> <p>Fentanyl is recommended for people with moderate to severe pain as an alternate option after morphine and depending on patient circumstances.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> <li>• How do similar districts compare?</li> </ul>
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## 9. People dispensed fentanyl for 6 or more weeks

Indicator #9:	People dispensed fentanyl for 6 or more weeks
Numerator	PHO-enrolled population who were dispensed fentanyl during the calendar year
Denominator	PHO-enrolled population during the calendar year
Data source	Pharmaceutical Collection, PHO Enrolment Collection
Analysis	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
Medication	1274 Fentanyl citrate; 3801 Fentanyl; 3896 Fentanyl citrate
Commentary	<p>Description: People dispensed fentanyl for 6 or more weeks.</p> <p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had fentanyl dispensed to them by a community pharmacy for six or more weeks in a year (2019 to 2023).</p> <p><b>Why this indicator is important</b></p> <p>Fentanyl is recommended for people with moderate to severe pain as an alternate option after morphine and depending on patient circumstances.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• Why are some districts consistently lower or higher than the national mean?</li> </ul>

	<ul style="list-style-type: none"> <li>• How do similar districts compare?</li> </ul>
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## 10. People dispensed a strong opioid who had a public hospital event in the 8 days prior to dispensing

<b>Indicator #10:</b>	People dispensed a strong opioid who had a public hospital event in the 8 days prior to dispensing
<b>Numerator</b>	PHO-enrolled population having a 'trigger event' in National Minimum Dataset (NMDS) or National Non-Admitted Patients Collection (NNPAC) in the eight days prior to first dispensing of a strong opioid.
<b>Denominator</b>	PHO-enrolled population who were dispensed a strong opioid, excluding those dispensed for opioid substitution treatment.
<b>Data source</b>	Pharmaceutical collection, NMDS, NNPAC, PHO enrolment Collection
<b>Analysis</b>	<p>District analysis: By year (2019 –2023), age group (0–24, 25–64; 65–79 and 80 and over), gender (female, male), ethnic group (Māori, Pacific peoples, Asian and European/Other) and Health New Zealand district of domicile.</p> <p>PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).</p>
<b>Comment</b>	See below for further analysis of conditions identified from the NMDS. This only includes public hospital events.
<b>Commentary</b>	<p>This indicator shows the number and rate per 1,000 of the PHO-enrolled population who had received a strong opioid and had a public hospital event in the eight days prior to dispensing of a strong opioid during the calendar year. Data is presented by year (2019 to 2023), ethnic group, age, gender and health district.</p> <p>A trigger event was defined as any public hospital inpatient or outpatient event that occurred no more than eight days before a strong opioid was dispensed. Only events occurring in public hospitals were included.</p> <p><b>Why this indicator is important</b></p> <p>All people starting a strong opioid will have a medical reason for doing so, and it is likely that many go to hospital. People receiving a strong opioid without a hospital event are expected to have received their prescription from either a private hospital or their GP.</p> <p><b>What questions does this prompt?</b></p> <ul style="list-style-type: none"> <li>• If there is wide variation in patients not identified as having a trigger event, what might this mean?</li> <li>• Why are some districts consistently lower or higher than the national mean?</li> </ul>



	<ul style="list-style-type: none"> <li>• How many patients were surgical or non-surgical?</li> <li>• How do similar districts compare?</li> </ul>
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