

## Addendum: Added May 2021

In this addendum is further information to be included in the 2018 and 2019 Office of the Director of Mental Health and Addiction Services (ODMHAS) Annual Report in relation to electroconvulsive therapy and section 95 inquiries under the Mental Health (Compulsory Assessment and Treatment) Act 1992 (the Mental Health Act).

Due to the addition of two graphs in the 'Electroconvulsive therapy' section of the report, this section is being republished in its entirety below. These graphs relate to the rates of people treated with electroconvulsive therapy by district health board, from 1 January to 31 December 2018 and 2019 respectively. No other statistics or information has been altered. The table and figure numbers do not coincide with the report and are specific to this addendum.

Section 95 inquiries are rare, and as shown in table 7, there have been no section 95 inquiries since 2016.

# Electroconvulsive therapy

Electroconvulsive therapy (ECT) is a therapeutic procedure that delivers a brief pulse of electricity to a person's brain in order to produce a seizure. It can be an effective treatment for depression, mania, catatonia and other serious neuropsychiatric conditions. It can only be given with the consent of the person receiving it, other than in carefully defined circumstances.

In summary, in 2018:

- 265 people received ECT (5.4 people per 100,000 population)
- services administered a total of 2,990 treatments of ECT
- those treated received an average of 11.3 treatments of ECT over the year
- females were more likely to receive ECT than males, making up 61 percent of ECT patients
- older people were more likely to receive ECT than younger people, with those over 50 years old making up 61 percent of ECT patients.

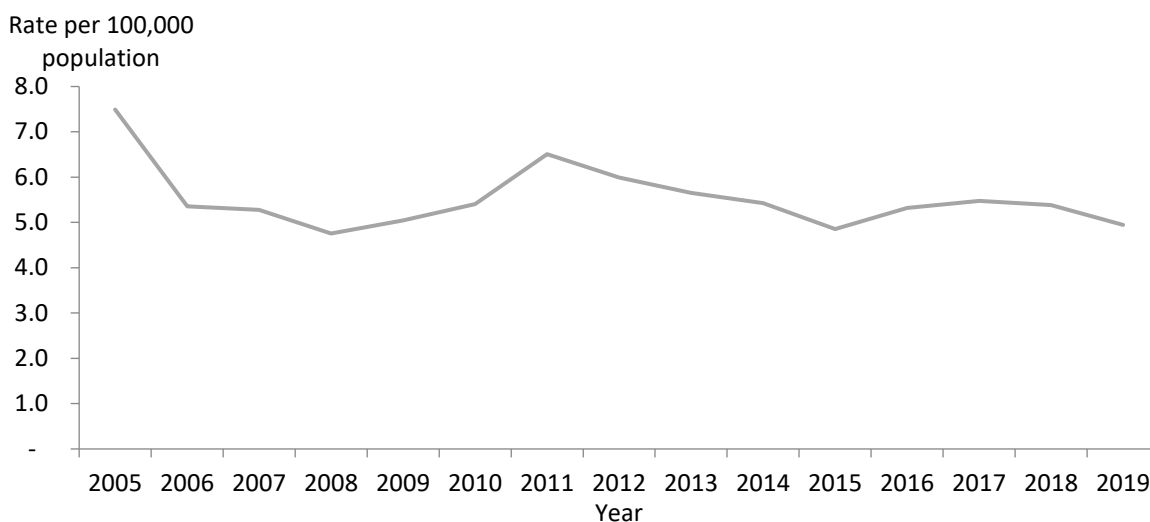
In 2019:

- 245 people received ECT (4.9 people per 100,000 population)
- services administered a total of 2,797 treatments of ECT
- those treated received an average of 11.4 administrations of ECT over the year
- females were more likely to receive ECT than males, making up 64 percent of ECT patients
- older people were more likely to receive ECT than younger people, with those over 50 years old making up 65 percent of ECT patients.

## ECT treatments in 2018 and 2019

The number of people treated with ECT in New Zealand has remained relatively stable since 2006. Around 200 to 300 people receive the treatment each year.

**Figure 1: Rate of people treated with ECT per 100,000 population, 2005-2019**



Sources: PRIMHD data (extracted 19 October 2020) and manual data from Southern DHB.

## ECT by region

The number and rate of ECT treatments vary regionally (see tables 1 and 2 and figures 2 and 3). In interpreting these differences, it is important to consider several factors that help to explain these variations. First, regions with smaller populations are more vulnerable to annual variations (according to the needs of the population at any given time). In addition, people receiving continuous or maintenance treatment will typically receive more treatments in a year than those treated with an acute course. Finally, populations in some DHBs have better access to ECT services than others.

**Table 1: ECT indicators, by DHB of domicile, 1 January to 31 December 2018**

| <b>DHB of domicile</b>   | <b>Number of people treated with ECT</b> | <b>Number of treatments</b> | <b>Mean number of treatments per person (range)</b> |
|--------------------------|------------------------------------------|-----------------------------|-----------------------------------------------------|
| Auckland                 | 20                                       | 265                         | 13 (2–31)                                           |
| Bay of Plenty            | 13                                       | 225                         | 17 (5–56)                                           |
| Canterbury               | 21                                       | 230                         | 11 (3–30)                                           |
| Capital & Coast          | 27                                       | 254                         | 9 (1–33)                                            |
| Counties Manukau         | 25                                       | 274                         | 11 (1–45)                                           |
| Hawke's Bay              | 7                                        | 27                          | 4 (1–7)                                             |
| Hutt Valley              | 17                                       | 149                         | 9 (1–22)                                            |
| Lakes                    | 5                                        | 34                          | 7 (1–19)                                            |
| MidCentral               | 9                                        | 124                         | 14 (2–38)                                           |
| Nelson Marlborough       | 4                                        | 36                          | 9 (1–12)                                            |
| Northland                | 13                                       | 150                         | 12 (1–25)                                           |
| South Canterbury         | 0                                        | 0                           | 0                                                   |
| Southern                 | 36                                       | 425                         | 12 (1–49)                                           |
| Tairāwhiti               | 1                                        | 6                           | 6 (6–6)                                             |
| Taranaki                 | 3                                        | 27                          | 9 (6–15)                                            |
| Waikato                  | 38                                       | 522                         | 14 (2–46)                                           |
| Wairarapa                | 0                                        | 0                           | 0                                                   |
| Waitematā                | 27                                       | 236                         | 9 (1–26)                                            |
| West Coast               | 1                                        | 6                           | 6 (6–6)                                             |
| Whanganui                | 0                                        | 0                           | 0                                                   |
| <b>New Zealand total</b> | <b>265</b>                               | <b>2,990</b>                | <b>11 (1–56)</b>                                    |

Notes: In 2018, 20 people were treated out of area, as follows:

- Auckland DHB saw one person from Bay of Plenty DHB, one person from Counties Manukau DHB and three from Waitematā DHB
- Bay of Plenty DHB saw one person from Tairāwhiti DHB
- Canterbury DHB saw one person from West Coast DHB
- Capital & Coast DHB saw five people from Hutt Valley DHB
- Counties Manukau DHB saw three people from Auckland DHB
- Hutt Valley DHB saw one person from Capital & Coast DHB
- Lakes DHB saw two people from Taranaki DHB
- Waikato DHB saw one person from Taranaki DHB
- Waitematā DHB saw one person from Waikato DHB.

Sources: PRIMHD data (extracted 29 July 2019) and manual data from Lakes, MidCentral, Nelson Marlborough, Southern and Waitematā DHBs.

**Table 2: ECT indicators, by DHB of domicile, 1 January to 31 December 2019**

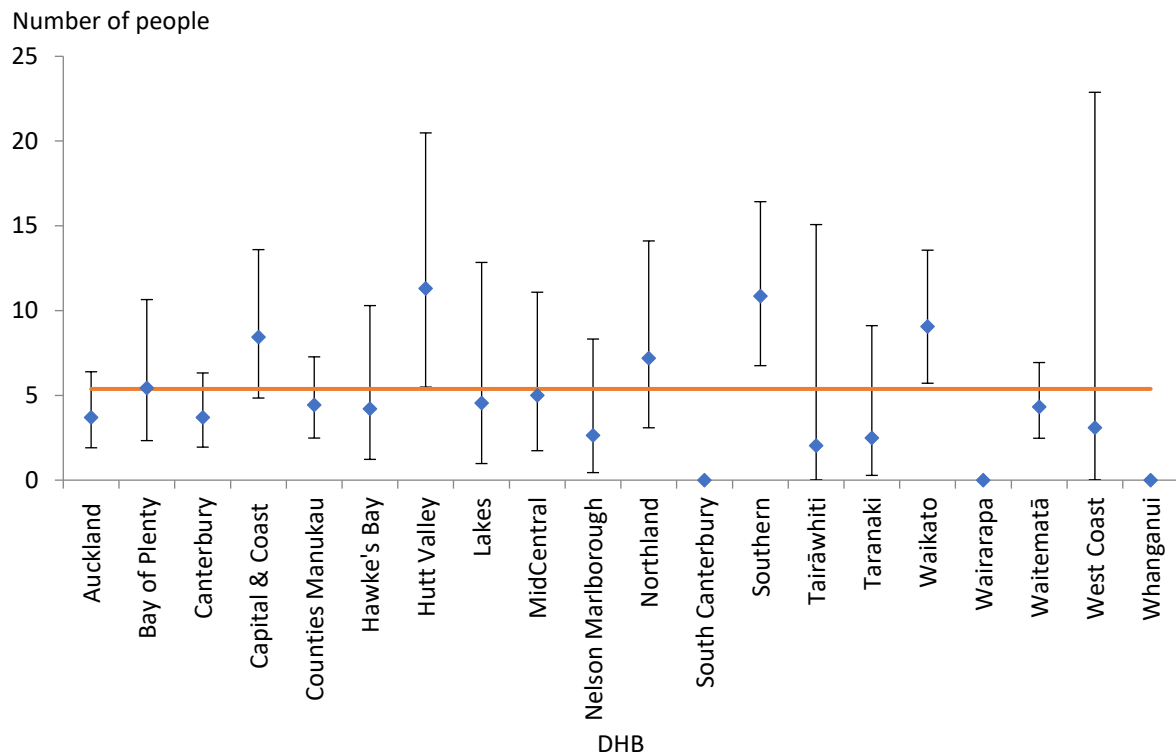
| <b>DHB of domicile</b>   | <b>Number of people treated with ECT</b> | <b>Number of treatments</b> | <b>Mean number of treatments per person (range)</b> |
|--------------------------|------------------------------------------|-----------------------------|-----------------------------------------------------|
| Auckland                 | 21                                       | 259                         | 12 (3–43)                                           |
| Bay of Plenty            | 19                                       | 236                         | 12 (6–49)                                           |
| Canterbury               | 21                                       | 193                         | 9 (1–61)                                            |
| Capital & Coast          | 20                                       | 278                         | 14 (1–58)                                           |
| Counties Manukau         | 20                                       | 169                         | 8 (1–28)                                            |
| Hawke's Bay              | 1                                        | 10                          | 10 (10–10)                                          |
| Hutt Valley              | 13                                       | 79                          | 6 (2–12)                                            |
| Lakes                    | 9                                        | 51                          | 6 (1–15)                                            |
| MidCentral               | 11                                       | 69                          | 6 (1–16)                                            |
| Nelson Marlborough       | 0                                        | 0                           | 0                                                   |
| Northland                | 10                                       | 131                         | 13 (3–25)                                           |
| South Canterbury         | 0                                        | 0                           | 0                                                   |
| Southern                 | 32                                       | 454                         | 14 (1–60)                                           |
| Tairāwhiti               | 4                                        | 28                          | 7 (4–12)                                            |
| Taranaki                 | 2                                        | 10                          | 5 (5–5)                                             |
| Waikato                  | 37                                       | 470                         | 13 (1–36)                                           |
| Wairarapa                | 0                                        | 0                           | 0                                                   |
| Waitematā                | 24                                       | 334                         | 14 (2–36)                                           |
| West Coast               | 2                                        | 15                          | 8 (4–11)                                            |
| Whanganui                | 1                                        | 11                          | 11 (11–11)                                          |
| <b>New Zealand total</b> | <b>246</b>                               | <b>2797</b>                 | <b>11 (1–61)</b>                                    |

Notes: In 2019, 16 people were treated out of area, as follows:

- Auckland DHB saw one person from Counties Manukau DHB
- Bay of Plenty DHB saw four people from Tairāwhiti DHB
- Canterbury DHB saw one person from Southern DHB and two people from West Coast DHB
- Capital & Coast DHB saw one person from Hutt Valley DHB
- Counties Manukau DHB saw one person from Auckland DHB and one person from Lakes DHB
- Hutt Valley DHB saw one person from MidCentral DHB
- MidCentral DHB saw one person from Whanganui DHB
- Waikato DHB saw one person from Taranaki DHB
- Waitematā DHB saw one person from Auckland DHB and one person from Waikato DHB.

Sources: PRIMHD data (extracted 19 October 2020) and manual data from Southern DHB.

**Figure 2: Number of people per 100,000 population treated with ECT, by DHB, 1 January to 31 December 2018**

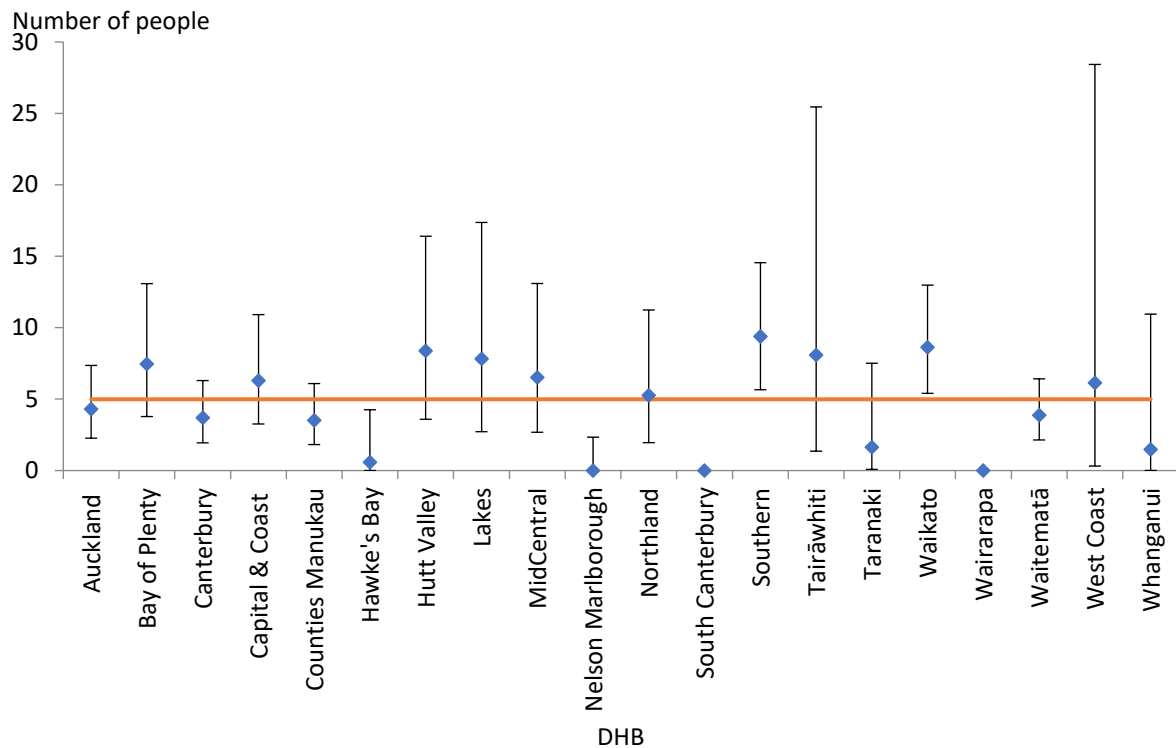


Notes: As the numbers of people receiving ECT by DHB are so small, it is difficult to make meaningful comparisons between DHBs using rates per 100,000 population.

Confidence intervals (for 99 percent confidence) have been used to aid interpretation. Where a DHB region's confidence interval crosses the national average, this means the DHB's rate was not statistically significantly different to the national average.

Source: PRIMHD data, extracted 29 July 2019, and manual data for Lakes, MidCentral, Nelson Marlborough, Southern and Waitematā DHBs.

**Figure 3: Number of people per 100,000 population treated with ECT, by DHB, 1 January to 31 December 2019**



Notes: As the numbers of people receiving ECT by DHB are so small, it is difficult to make meaningful comparisons between DHBs using rates per 100,000 population.

Confidence intervals (for 99 percent confidence) have been used to aid interpretation. Where a DHB region's confidence interval crosses the national average, this means the DHB's rate was not statistically significantly different to the national average.

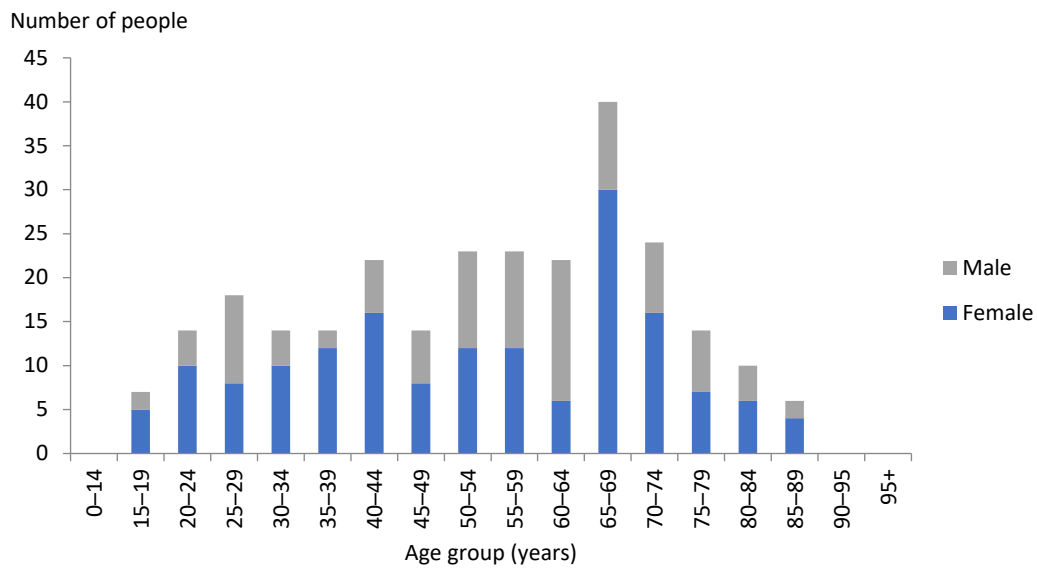
Source: PRIMHD data, extracted 19 October 2020, and manual data for Southern DHB.

## Sex and age of people receiving ECT

In 2018 and 2019, women were more likely to receive ECT than men. This ratio is similar to that reported in other countries.

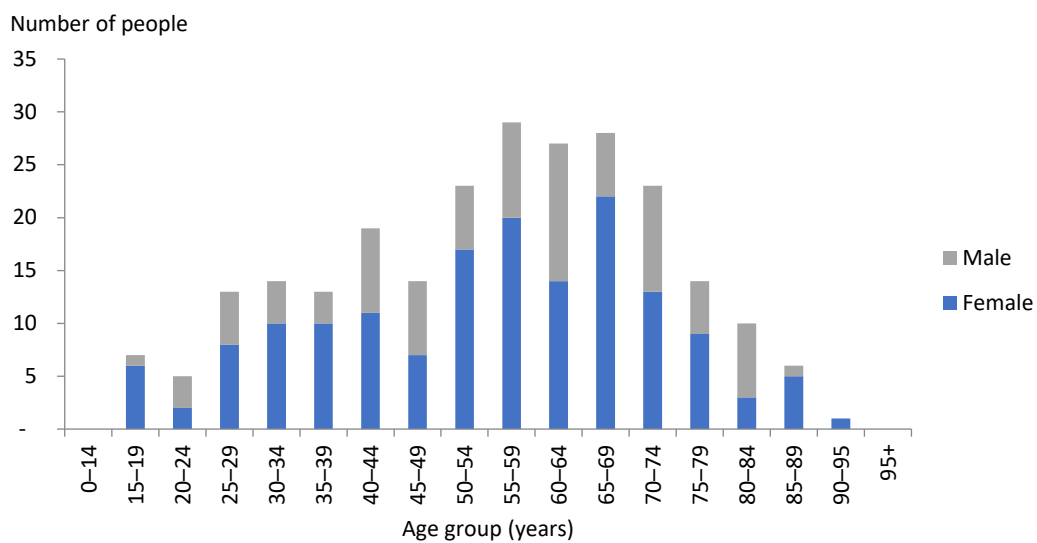
Older people were more likely to receive ECT than younger people, with patients over 50 years old representing 61 percent of all patients in 2018 and 65 percent of all patients in 2019.

**Figure 4: Number of people treated with ECT, by age group and sex, 1 January to 31 December 2018**



Sources: PRIMHD data (extracted 29 July 2019) and manual data from Lakes, MidCentral, Nelson Marlborough, Southern and Waitematā DHBs.

**Figure 5: Number of people treated with ECT, by age group and sex, 1 January to 31 December 2019**



Sources: PRIMHD data (extracted 19 October 2020) and manual data from Southern DHB.



# Ethnicity of people treated with ECT

Tables 3 and 4 indicate that Asian, Māori and Pacific peoples are less likely to receive ECT than those of other ethnicities, such as New Zealand European. However, the numbers involved are so small that it is not statistically appropriate to compare the percentages of people receiving ECT in each ethnic group with the proportion of each ethnic group in the total population of New Zealand.

**Table 3: Number of people treated with ECT, by ethnicity, 1 January to 31 December 2018**

| <b>Ethnicity</b> | <b>Number</b> |
|------------------|---------------|
| Asian            | 21            |
| Māori            | 33            |
| Pacific          | 8             |
| Other            | 203           |
| <b>Total</b>     | <b>265</b>    |

Sources: PRIMHD data (extracted 29 July 2019) and manual data from Lakes, MidCentral, Nelson Marlborough, Southern and Waitematā DHBs.

**Table 4: Number of people treated with ECT, by ethnicity, 1 January to 31 December 2019**

| <b>Ethnicity</b> | <b>Number</b> |
|------------------|---------------|
| Asian            | 15            |
| Māori            | 23            |
| Pacific          | 6             |
| Other            | 202           |
| <b>Total</b>     | <b>246</b>    |

Sources: PRIMHD data (extracted 19 October 2020) and manual data from Southern DHB.

## Consent to treatment

Under the Mental Health Act, a person can be treated with ECT if they consent in writing, or if an independent psychiatrist appointed by the Mental Health Review Tribunal considers this treatment to be in the person's interests. An independent psychiatrist cannot be the patient's responsible clinician or part of the patient's clinical team.

During 2018, services administered ECT to 99 people who could not consent to treatment. The total number of ECT treatments administered without consent was 1,024, a slight decrease from 1,137 treatments in 2017. An additional 23 treatments were administered to two people who did have capacity to consent but refused, after the DHB gained a second opinion from an independent psychiatrist.

During 2019, services administered ECT to 88 people who could not consent to treatment. The total number of ECT treatments administered without consent was 838, a decrease from 2018. An additional 36 treatments were administered to four people who did have capacity to consent but refused after the DHB gained a second opinion from an independent psychiatrist.

Tables 5 and 6 show the number of treatments administered without consent during 2018 and 2019.

**Table 5: ECT administered under second opinion without consent, by DHB of service, 1 January to 31 December 2018**

| DHB of service     | Second opinion where patient did not have the capacity to consent |                                   | Second opinion where patient had capacity and refused to consent |                                   |
|--------------------|-------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------|-----------------------------------|
|                    | Number of people given ECT                                        | Number of treatments administered | Number of people given ECT                                       | Number of treatments administered |
| Auckland           | 11                                                                | 97                                | 0                                                                | 0                                 |
| Bay of Plenty      | 2                                                                 | 24                                | 0                                                                | 0                                 |
| Canterbury         | 10                                                                | 118                               | 2                                                                | 23                                |
| Capital & Coast    | 5                                                                 | 49                                | 0                                                                | 0                                 |
| Counties Manukau   | 14                                                                | 146                               | 0                                                                | 0                                 |
| Hawke's Bay        | 1                                                                 | 22                                | 0                                                                | 0                                 |
| Hutt Valley        | 7                                                                 | 42                                | 0                                                                | 0                                 |
| Lakes              | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| MidCentral         | 4                                                                 | 65                                | 0                                                                | 0                                 |
| Nelson Marlborough | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| Northland          | 5                                                                 | 49                                | 0                                                                | 0                                 |
| South Canterbury   | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| Southern           | 10                                                                | 140                               | 0                                                                | 0                                 |
| Tairāwhiti         | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| Taranaki           | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| Waikato            | 14                                                                | 178                               | 0                                                                | 0                                 |
| Wairarapa          | –                                                                 | –                                 | –                                                                | –                                 |
| Waitematā          | 16                                                                | 94                                | 0                                                                | 0                                 |
| West Coast         | –                                                                 | –                                 | –                                                                | –                                 |
| Whanganui          | –                                                                 | –                                 | –                                                                | –                                 |
| <b>New Zealand</b> | <b>99</b>                                                         | <b>1,024</b>                      | <b>2</b>                                                         | <b>23</b>                         |

Notes: The data in this table cannot be reliably compared with the data in Table 18 because it relates to DHB of service rather than DHB of domicile.

A dash (–) indicates the DHB does not perform ECT. In this case, the DHB sends people to other DHBs for treatment.

Source: Manual data from DHBs.

**Table 6: ECT administered under second opinion without consent, by DHB of service, 1 January to 31 December 2019**

| DHB of service     | Second opinion where patient did not have the capacity to consent |                                   | Second opinion where patient had capacity and refused to consent |                                   |
|--------------------|-------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------|-----------------------------------|
|                    | Number of people given ECT                                        | Number of treatments administered | Number of people given ECT                                       | Number of treatments administered |
| Auckland           | 6                                                                 | 50                                | 0                                                                | 0                                 |
| Bay of Plenty      | 2                                                                 | 30                                | 0                                                                | 0                                 |
| Canterbury         | 10                                                                | 44                                | 4                                                                | 36                                |
| Capital & Coast    | 4                                                                 | 26                                | 0                                                                | 0                                 |
| Counties Manukau   | 10                                                                | 74                                | 0                                                                | 0                                 |
| Hawke's Bay        | 1                                                                 | 8                                 | 0                                                                | 0                                 |
| Hutt Valley        | 5                                                                 | 21                                | 0                                                                | 0                                 |
| Lakes              | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| MidCentral         | 4                                                                 | 26                                | 0                                                                | 0                                 |
| Nelson Marlborough | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| Northland          | 5                                                                 | 62                                | 0                                                                | 0                                 |
| South Canterbury   | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| Southern           | 12                                                                | 198                               | 0                                                                | 0                                 |
| Tairāwhiti         | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| Taranaki           | 0                                                                 | 0                                 | 0                                                                | 0                                 |
| Waikato            | 12                                                                | 114                               | 0                                                                | 0                                 |
| Wairarapa          | –                                                                 | –                                 | –                                                                | –                                 |
| Waitematā          | 17                                                                | 184                               | 0                                                                | 0                                 |
| West Coast         | –                                                                 | –                                 | –                                                                | –                                 |
| Whanganui          | –                                                                 | –                                 | –                                                                | –                                 |
| <b>New Zealand</b> | <b>88</b>                                                         | <b>838</b>                        | <b>4</b>                                                         | <b>36</b>                         |

Notes: The data in this table cannot be reliably compared with the data in Table 19 because it relates to DHB of service rather than DHB of domicile.

A dash (–) indicates the DHB does not perform ECT. In this case, the DHB sends people to other DHBs for treatment.

Source: Manual data from DHBs.

## Section 95 inquiries

The Director will occasionally require a district inspector to carry out an inquiry under section 95 of the Mental Health Act. Such inquiries generally focus on systemic issues across one or more mental health services. They typically result in the district inspector making specific recommendations about the mental health services and/or their system.

The Director considers the recommendations, and acts on any that have implications for the Ministry or the mental health sector. The Director later audits the DHB's implementation of the recommendations.

The inquiry process is not completed until the Director considers that the DHB concerned and, if appropriate, the Ministry and all other DHBs have satisfactorily implemented the recommendations.

No section 95 inquiries were completed during 2018 and 2019. Table 7 shows the number of completed section 95 inquiry reports received by the Director of Mental Health between 2003 and 2019.

**Table 7: Number of completed section 95 inquiry reports received by the Director of Mental Health, 2003–2019**

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 2    | 1    | 4    | 1    | 1    | 3    | 2    | 1    | 1    | 0    | 0    | 1    | 2    | 0    | 0    | 0    |

Source: Office of the Director of Mental Health and Addiction Services records