

CHAPTER 11

Kidney Failure among Māori in Aotearoa New Zealand

Reporting the incidence, prevalence and survival in
Māori patients of Aotearoa New Zealand receiving
kidney replacement therapy

CONTENTS

| | |
|---|----|
| Summary and Highlights | 3 |
| Suggested Citation | 3 |
| New Patients | 4 |
| Primary Kidney Disease | 5 |
| Incidence Rates | 5 |
| Prevalent Patients | 8 |
| Incidence and Prevalence per Population | 10 |
| Transplantation | 11 |
| Patient and Transplant Survival | 13 |
| Dialysis | 15 |
| Timing of Dialysis Initiation | 16 |
| Late Referral | 16 |
| Vascular Access | 17 |
| Incident Vascular Access | 17 |
| Prevalent Vascular Access | 18 |
| Patient Flow | 19 |
| Cause of Death | 20 |
| References | 21 |

SUMMARY AND HIGHLIGHTS

This chapter describes the rates, clinical care patterns and outcomes of treatment for kidney failure for people identifying as Māori living in Aotearoa New Zealand.

The denominator population statistics are stratified by ethnicity and drawn from estimates provided by Statistics New Zealand to calculate disease and treatment rates¹. Ethnicity population data are projections produced by Statistics New Zealand according to assumptions agreed to by the New Zealand Ministry of Health; these include data from the 2018 census and incorporate additional information gained from the post-enumeration survey.

Please note that collection of ethnicity data in ANZDATA has evolved to align with the Australian Bureau of Statistics Australian Standard Classification of Cultural and Ethnic Groups² and data collection now allows a patient to nominate more than one ethnicity group. However, consultation regarding reporting of ethnicity data is ongoing, and reporting guidelines are not finalised at publication. As a result, ethnicity data throughout this report includes only the first nominated ethnicity category entered for each patient. Future reporting will aim to report more accurately on patients with more than one ethnicity.

This report highlights key disparities and trends in kidney failure treatment among Māori and non-Māori, non-Pacific populations in Aotearoa New Zealand from 2019 to 2023. The data reveals a disproportionate burden of kidney disease and treatment challenges for Māori, including higher rates of kidney failure, lower transplant rates, and significant differences in dialysis practices.

Māori makes up 26% of new kidney replacement therapy (KRT) population in 2023, with leading cause being diabetic kidney disease (66%) which is significantly higher than 29% of non-Māori, non-Pacific patients. There is persistently high incidence of kidney failure among Māori across all age groups, starting as early as ages 15-24.

Māori patients are 3 times more likely to start with haemodialysis compared to non-Māori, non-Pacific populations. A lower proportion of Māori patients are on home-based dialysis.

Access to pre-emptive renal transplant remains low with only 15 Māori received pre-emptive kidney transplants compared to 143 non-Māori non-Pacific patients over the last 5 years.

At 5 years post-transplant, Māori transplant patients have worse outcomes with lower patient (85% of Māori recipients vs. 91% of non-Māori, non-Pacific recipients) and graft survival rate (78% of Māori recipients compared with 86% of non-Māori, non-Pacific population).

This report underscores the significant and persistent health inequities faced by Māori in kidney failure treatment, emphasizing the need for focused interventions to improve access to early diagnosis, equitable treatment options, and transplant opportunities.

The renal services of Aotearoa New Zealand acknowledge Te Tiriti ō Waitangi / The Treaty of Waitangi principles. This report includes monitoring the current health provision to whānau Māori to monitor equity. These data intend to inform quality improvement within health systems and by health providers.

SUGGESTED CITATION

T Sun, C Davies, E Au, S Bateman, J Chen, P Clayton, K Hurst, F Kholmurodova, D Lee, H McCarthy, S McDonald, W Mulley, M Roberts, B Solomon, G Irish. 47th Report, Chapter 11: Kidney Failure among Māori in Aotearoa New Zealand. Australia and New Zealand Dialysis and Transplant Registry, Adelaide, Australia. 2024. Available at: <http://www.anzdata.org.au>

NEW PATIENTS

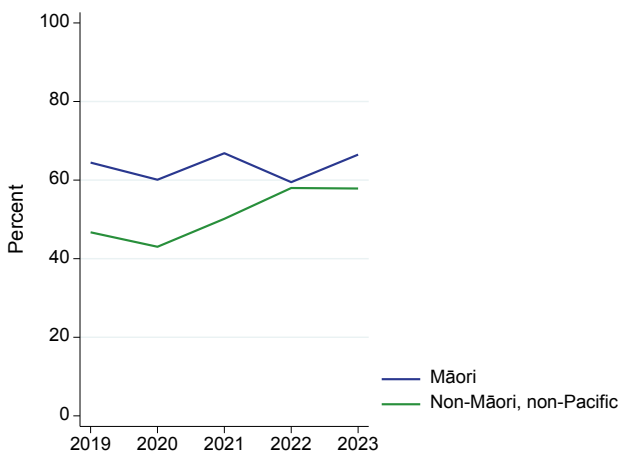
A total of 185 patients identifying as Māori commenced treatment for kidney failure in 2023, representing 26% of all patients starting kidney replacement therapy. The rate of haemodialysis commencement in non-Māori and non-Pacific patients was 3-fold lower than for Māori. Māori were more likely to commence haemodialysis than peritoneal dialysis compared with non-Māori and non-Pacific patients (Figure 11.1). Two Māori patients received a pre-emptive kidney transplant in 2023. In the last 5 years, 15 Māori patients have received a pre-emptive kidney transplant compared with 143 non-Māori and non-Pacific patients.

Table 11.1
New Patients (per million population) Aotearoa New Zealand 2019-2023

| Year | Modality | Māori | Non-Māori, non-Pacific |
|------|------------------------|-----------|------------------------|
| 2019 | Haemodialysis | 136 (163) | 135 (36) |
| | Peritoneal Dialysis | 74 (89) | 124 (33) |
| | Pre-emptive Transplant | 1 (1) | 30 (8) |
| 2020 | Haemodialysis | 128 (150) | 139 (37) |
| | Peritoneal Dialysis | 80 (94) | 148 (39) |
| | Pre-emptive Transplant | 5 (6) | 36 (9) |
| 2021 | Haemodialysis | 127 (145) | 170 (45) |
| | Peritoneal Dialysis | 57 (65) | 136 (36) |
| | Pre-emptive Transplant | 6 (7) | 33 (9) |
| 2022 | Haemodialysis | 113 (127) | 196 (52) |
| | Peritoneal Dialysis | 76 (85) | 121 (32) |
| | Pre-emptive Transplant | 1 (1) | 21 (6) |
| 2023 | Haemodialysis | 123 (136) | 184 (47) |
| | Peritoneal Dialysis | 60 (66) | 111 (29) |
| | Pre-emptive Transplant | 2 (2) | 23 (6) |

22 excluded due to unreported ethnicity.

Figure 11.1
Percentage of New Patients Commencing on Haemodialysis - Aotearoa New Zealand 2019-2023



PRIMARY KIDNEY DISEASE

The primary kidney diseases of incident Aotearoa New Zealand patients over 2019-2023 are in Table 11.2. Māori patients experience diabetic kidney disease at a substantially higher rate than non-Māori, non-Pacific patients.

Figure 11.2
Primary Kidney Disease of New Patients Aotearoa New Zealand 2019-2023

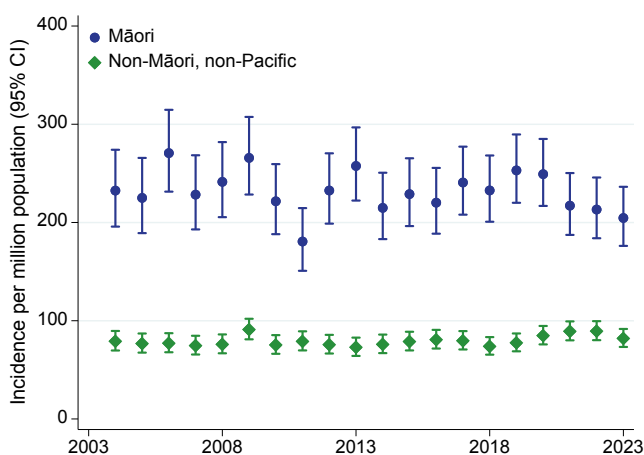
| Primary Kidney Disease | Māori | Non-Māori, non-Pacific |
|--|------------|------------------------|
| Diabetic kidney disease | 652 (66%) | 464 (29%) |
| Glomerular disease | 125 (13%) | 415 (26%) |
| Hypertension / Renal vascular disease | 60 (6%) | 222 (14%) |
| Familial / hereditary kidney diseases | 20 (2%) | 164 (10%) |
| Tubulointerstitial disease | 58 (6%) | 156 (10%) |
| Other systemic diseases affecting the kidney | 12 (1%) | 46 (3%) |
| Miscellaneous kidney disorders | 56 (6%) | 133 (8%) |
| Not reported | 6 (1%) | 7 (<1%) |
| Total | 989 | 1607 |

22 excluded due to unreported ethnicity.

INCIDENCE RATES

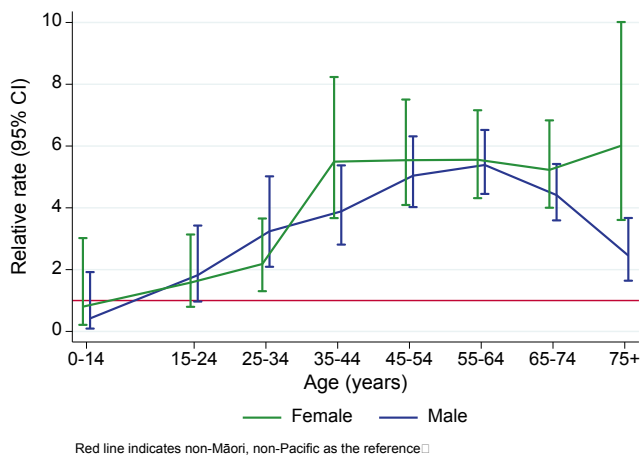
Overall, the incidence rates of kidney failure for Māori patients are markedly and persistently higher than those for non-Māori and non-Pacific patients (Figure 11.2). The inequity is confounded and underestimated by the age distributions of each population with Māori populations being considerably younger.

Figure 11.2
Unadjusted Incident KRT Rate - Aotearoa New Zealand



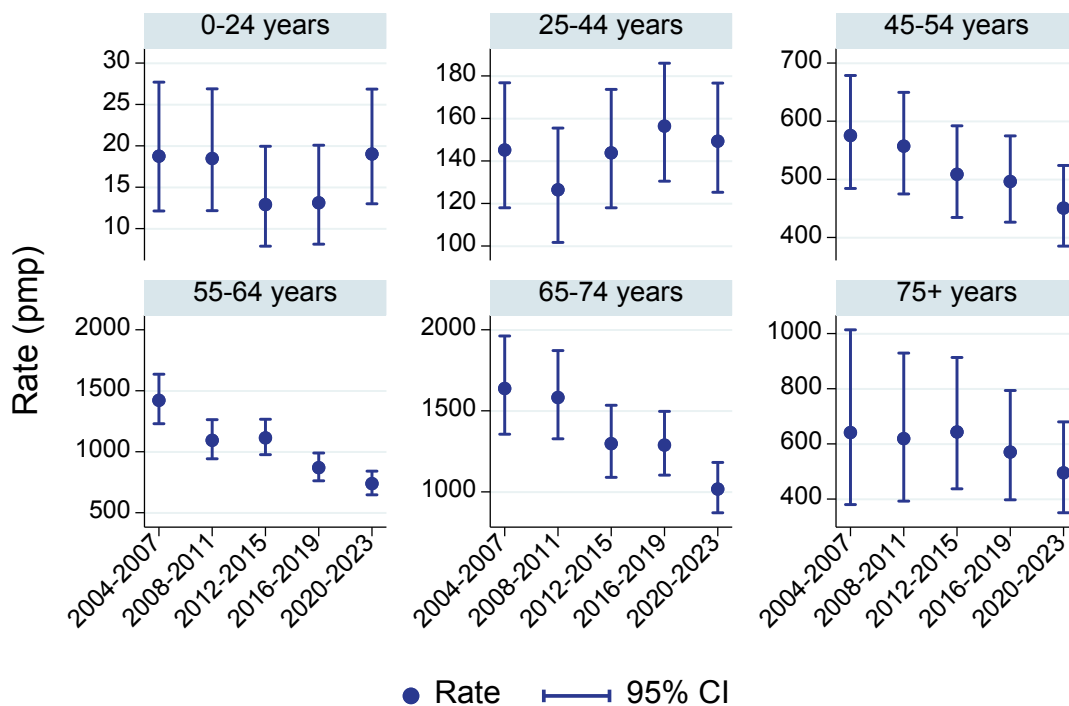
The disparities in the incidence of kidney failure in Māori persons, compared to non-Māori, non-Pacific persons, occur as early as ages 15 to 24 years and are evident across all age groups above this (Figure 11.3).

Figure 11.3
Relative Incidence Rate of Treated Kidney Failure for Māori Patients compared with non-Māori, non-Pacific Patients by Gender - Aotearoa New Zealand 2019-2023



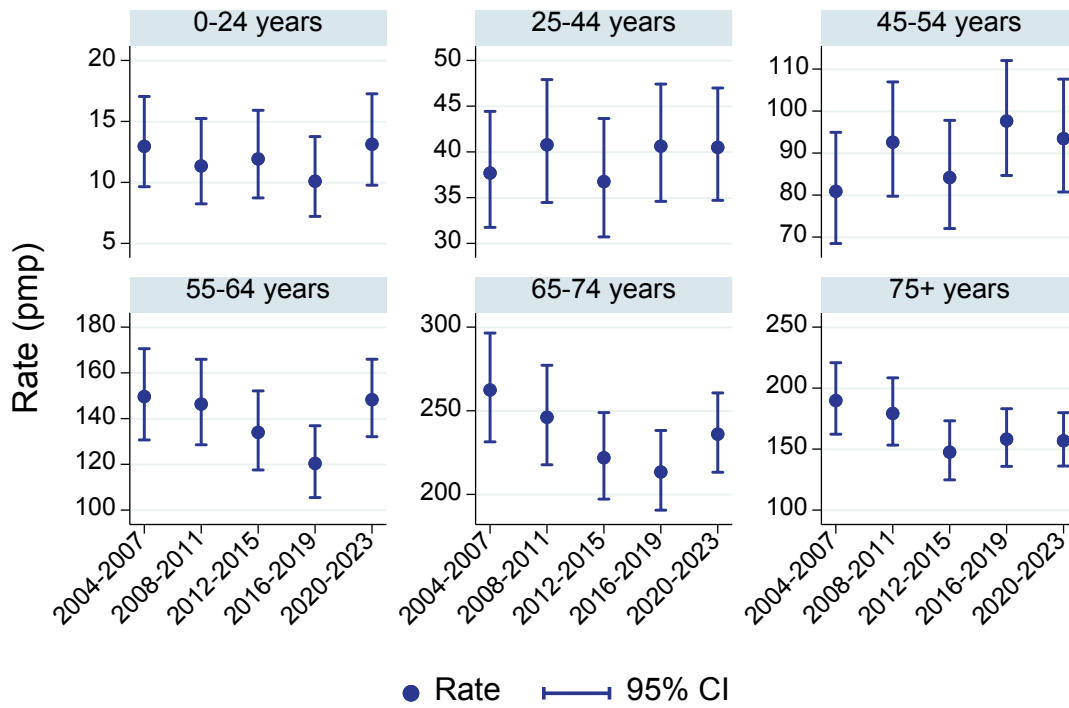
Age specific trends in kidney replacement therapy practices for Māori are shown in Figure 11.4; note that the Y axis scales vary.

Figure 11.4.1
Age-specific Incidence Rates of Treated Kidney Failure - Māori, Aotearoa New Zealand 2004-2023



Note the Y axis scales vary between panels

Figure 11.4.2
**Age-specific Incidence Rates of Treated Kidney Failure -
 Non-Māori, non-Pacific, Aotearoa New Zealand 2004-2023**



Note the Y axis scales vary between panels

PREVALENT PATIENTS

The number of prevalent patients with treated kidney failure by treatment modality for Māori and non-Māori, non-Pacific persons is shown in Table 11.3 and Figures 11.5 and 11.6.

Table 11.3

Prevalent Patients by Ethnicity and Treatment Modality Aotearoa New Zealand 2019-2023

| Year | Modality | Māori | Non-Māori, non-Pacific |
|------|-----------------------|-----------|------------------------|
| 2019 | HD | 673 (57%) | 679 (25%) |
| | HD at home* (% of HD) | 135 (20%) | 174 (26%) |
| | PD [^] | 247 (21%) | 398 (15%) |
| | Transplant | 252 (22%) | 1632 (60%) |
| 2020 | HD | 706 (57%) | 678 (24%) |
| | HD at home* (% of HD) | 127 (18%) | 163 (24%) |
| | PD [^] | 255 (21%) | 426 (15%) |
| | Transplant | 267 (22%) | 1701 (61%) |
| 2021 | HD | 749 (60%) | 756 (26%) |
| | HD at home* (% of HD) | 122 (16%) | 167 (22%) |
| | PD [^] | 225 (18%) | 419 (14%) |
| | Transplant | 283 (23%) | 1746 (60%) |
| 2022 | HD | 719 (58%) | 802 (27%) |
| | HD at home* (% of HD) | 116 (16%) | 166 (21%) |
| | PD [^] | 218 (18%) | 395 (13%) |
| | Transplant | 296 (24%) | 1769 (60%) |
| 2023 | HD | 715 (58%) | 860 (28%) |
| | HD at home* (% of HD) | 108 (15%) | 172 (20%) |
| | PD [^] | 206 (17%) | 384 (13%) |
| | Transplant | 312 (25%) | 1798 (59%) |

*Includes Community House HD

[^]Includes Hybrid Dialysis

114 excluded due to unreported ethnicity.

Figure 11.5.1
Prevalent Patients by Modality - Aotearoa New Zealand - Māori

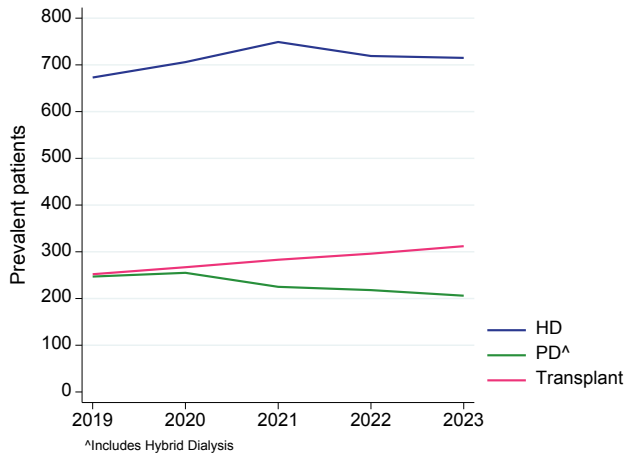


Figure 11.5.2
Prevalent Patients by Modality - Aotearoa New Zealand - Non-Māori, non-Pacific

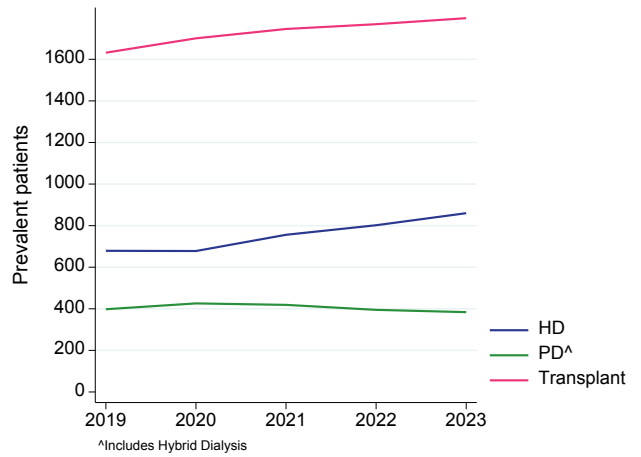
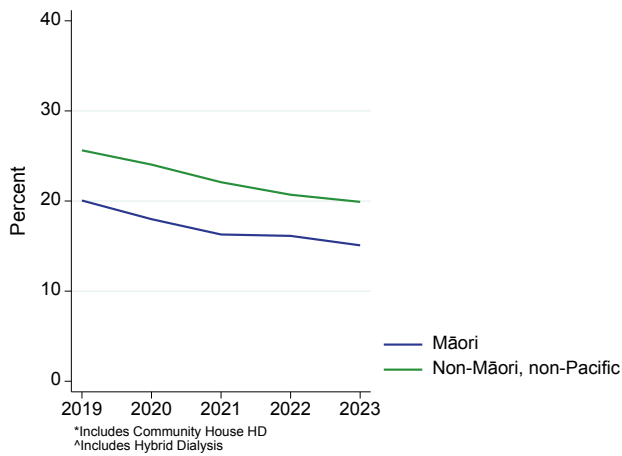


Figure 11.6
Prevalent Haemodialysis at Home* (% of all HD[^]) by Ethnicity - Aotearoa New Zealand



INCIDENCE AND PREVALENCE PER POPULATION

Figure 11.7
Incidence of Kidney Replacement Therapy Patients - Aotearoa New Zealand

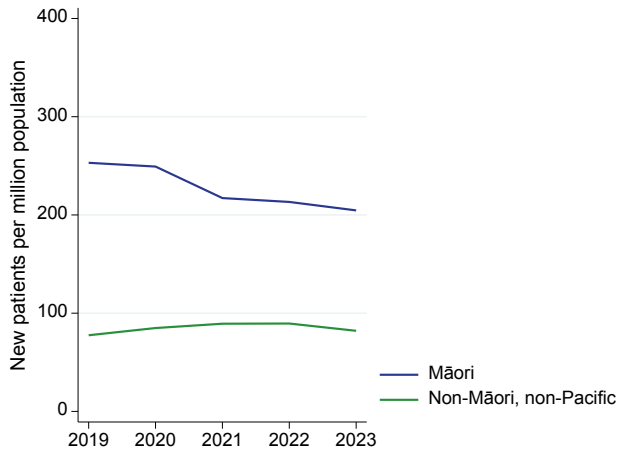


Figure 11.8
Incidence of Kidney Transplants - Aotearoa New Zealand

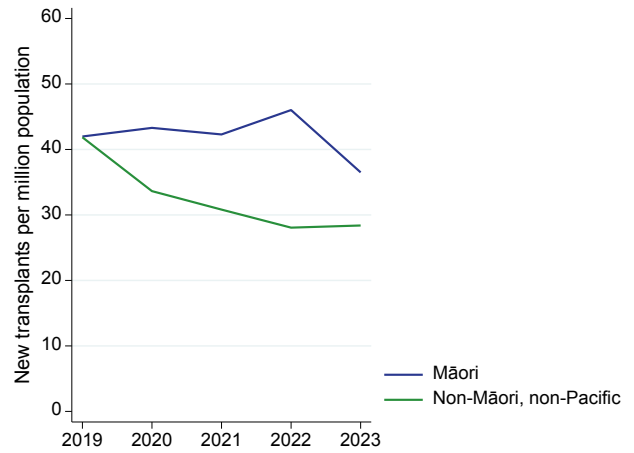


Figure 11.9
Prevalent Haemodialysis[^] Patients - Aotearoa New Zealand

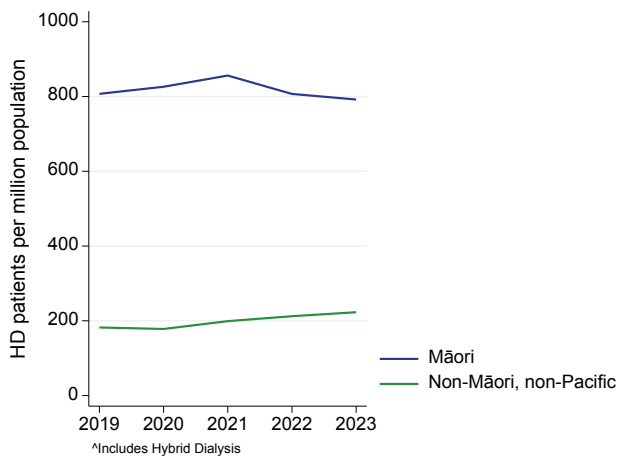


Figure 11.10
Prevalent Peritoneal Dialysis[^] Patients - Aotearoa New Zealand

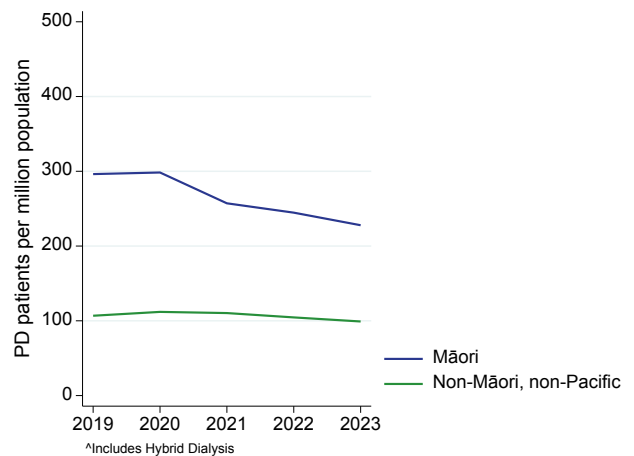


Figure 11.11
Prevalent Transplant Patients - Aotearoa New Zealand

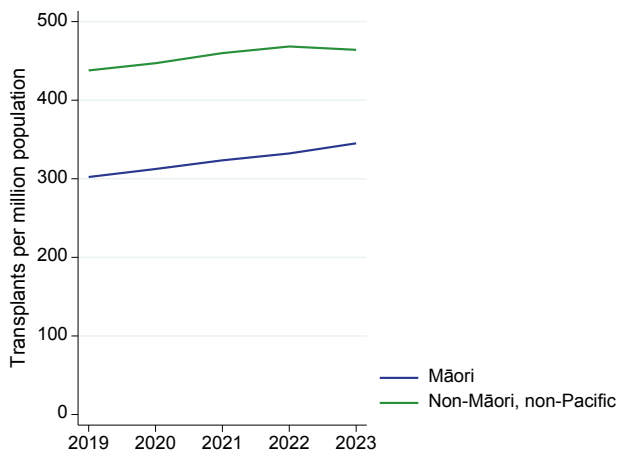
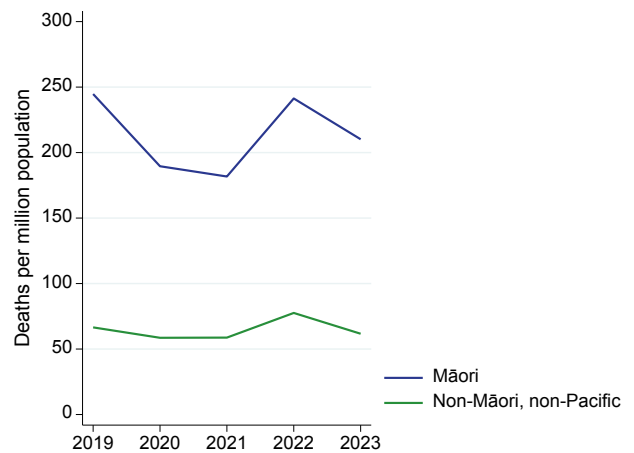


Figure 11.12
Deaths of KRT Patients - Aotearoa New Zealand



[BACK TO CONTENTS](#)

TRANSPLANTATION

The numbers of kidney transplant recipients over the last 10 years are shown in Table 11.4 by ethnicity and donor type. Figure 11.13 shows the transplant rate of dialysed patients aged 15-64 years, using dialysis time as the denominator. This illustrates that Māori patients receive a kidney transplant at a much lower rate than Non-Māori, non-Pacific patients. Information on donor sources is in Figure 11.14, and trends are in Figure 11.15.

Table 11.4
Number of Transplant Recipients (pmp) by Donor Type and Ethnicity Aotearoa New Zealand 2014-2023

| Year | Donor Type | Māori | Non-Māori, non-Pacific |
|------|----------------|----------------|------------------------|
| 2014 | Deceased Donor | 13 (17) | 44 (13) |
| | Living Donor | 12 (16) | 52 (15) |
| | Total | 25 (33) | 96 (28) |
| 2015 | Deceased Donor | 13 (17) | 44 (13) |
| | Living Donor | 15 (20) | 54 (16) |
| | Total | 28 (36) | 98 (28) |
| 2016 | Deceased Donor | 13 (17) | 58 (16) |
| | Living Donor | 13 (17) | 57 (16) |
| | Total | 26 (33) | 115 (32) |
| 2017 | Deceased Donor | 17 (21) | 71 (20) |
| | Living Donor | 6 (7) | 52 (14) |
| | Total | 23 (29) | 123 (34) |
| 2018 | Deceased Donor | 15 (18) | 65 (18) |
| | Living Donor | 14 (17) | 59 (16) |
| | Total | 29 (36) | 124 (34) |
| 2019 | Deceased Donor | 24 (29) | 83 (22) |
| | Living Donor | 11 (13) | 73 (20) |
| | Total | 35 (42) | 156 (42) |
| 2020 | Deceased Donor | 23 (27) | 60 (16) |
| | Living Donor | 14 (16) | 68 (18) |
| | Total | 37 (43) | 128 (34) |
| 2021 | Deceased Donor | 23 (26) | 55 (14) |
| | Living Donor | 14 (16) | 62 (16) |
| | Total | 37 (42) | 117 (31) |
| 2022 | Deceased Donor | 28 (31) | 53 (14) |
| | Living Donor | 13 (15) | 53 (14) |
| | Total | 41 (46) | 106 (28) |
| 2023 | Deceased Donor | 19 (21) | 58 (15) |
| | Living Donor | 14 (15) | 52 (13) |
| | Total | 33 (37) | 110 (28) |

7 excluded due to unreported ethnicity.

[BACK TO CONTENTS](#)

Figure 11.13
Transplant Rate of Dialysed Patients by Ethnicity 2014-2023 - Aotearoa New Zealand, Patients Aged 15-64

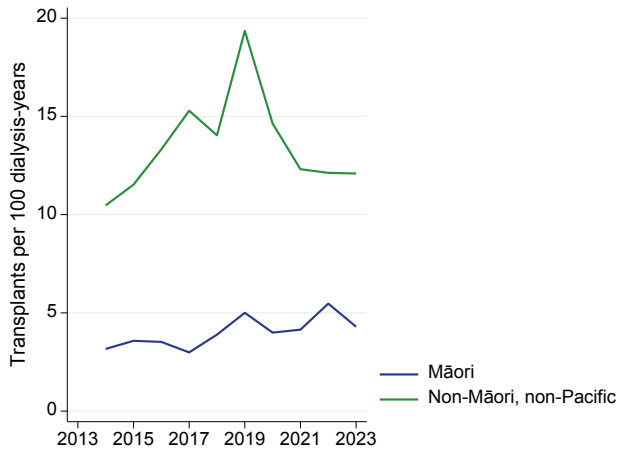


Figure 11.14
Donor Type by Ethnicity - Aotearoa New Zealand 2014-2023

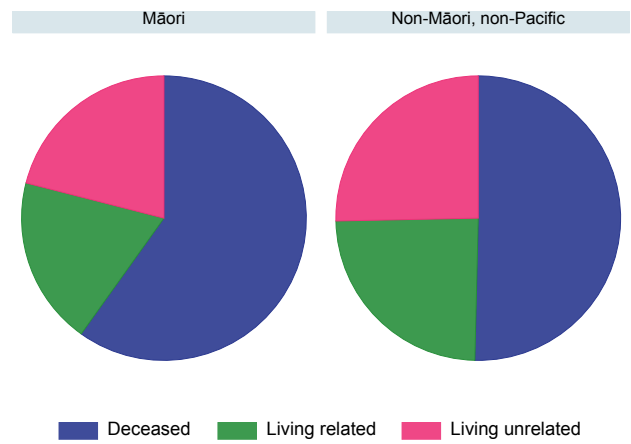


Figure 11.15
Donor Type by Ethnicity and Year - Aotearoa New Zealand

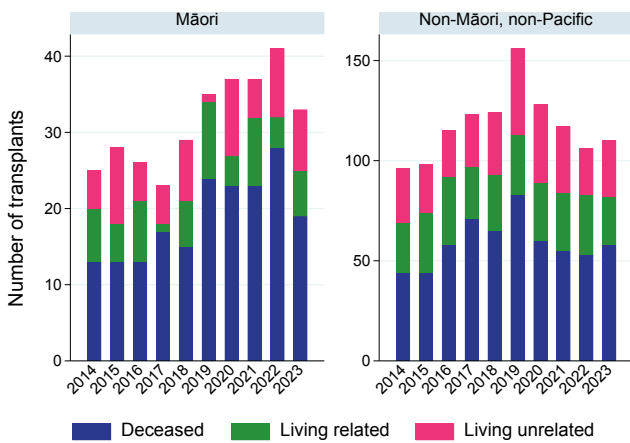


Figure 11.16
Percentage of Patients Starting Kidney Replacement Therapy with Pre-emptive Kidney Transplant - Aotearoa New Zealand

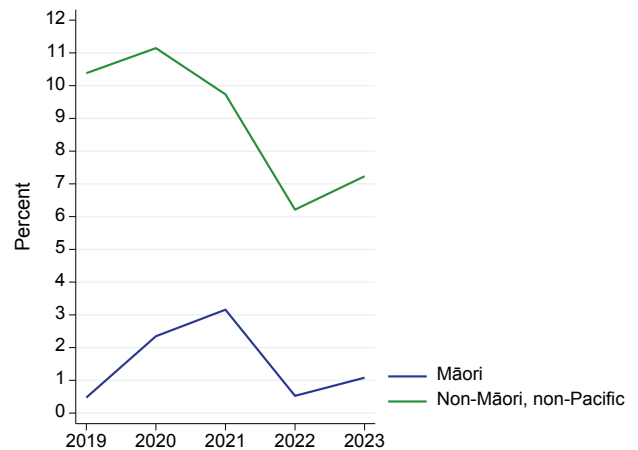


Figure 11.17 shows the cumulative incidence curve of primary transplant after starting KRT (utilising competing risk techniques to account for the effect of the competing risk of death). Figure 11.18 shows the cumulative incidence curves of primary transplant after starting KRT by era.

Figure 11.17
Time to Primary Transplant from KRT Start - Aotearoa New Zealand Incident KRT Patients 2014-2023

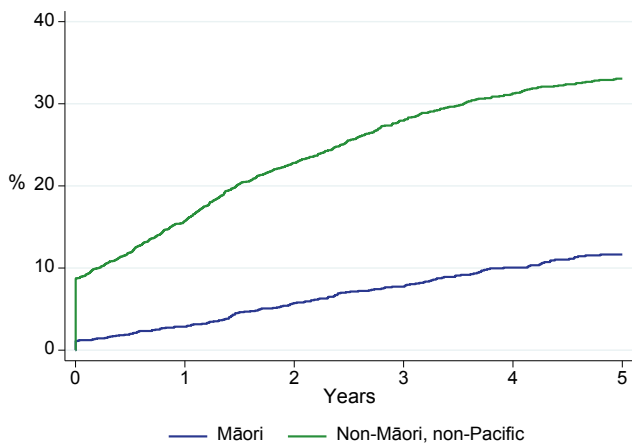
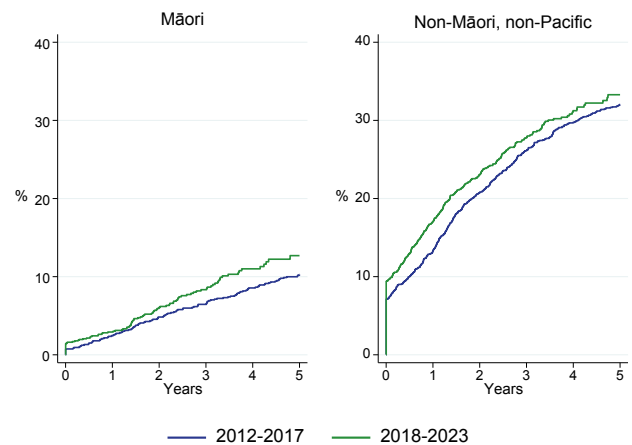


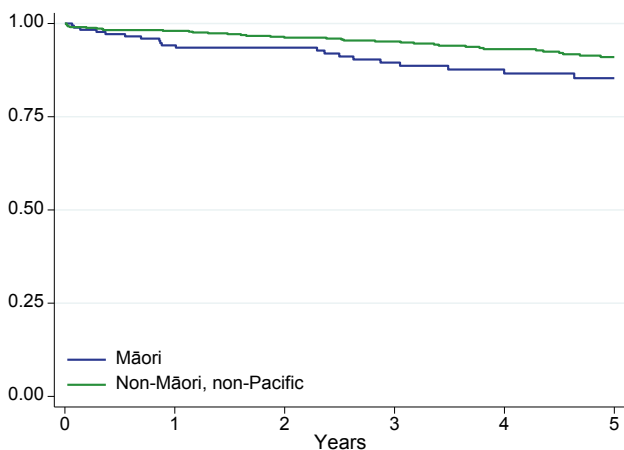
Figure 11.18
Time to Primary Transplant from KRT Start by Era - Aotearoa New Zealand Incident KRT Patients



PATIENT AND TRANSPLANT SURVIVAL

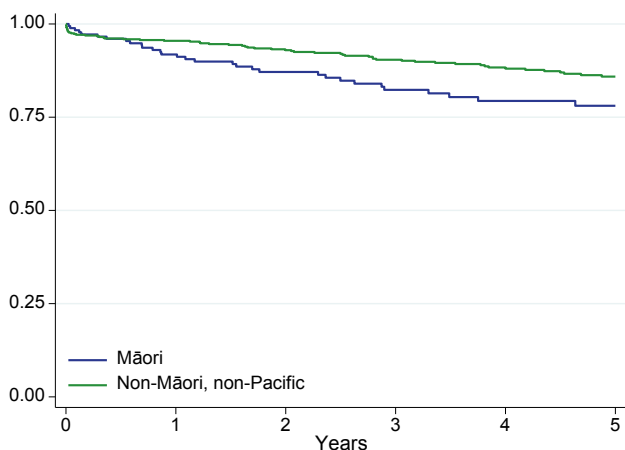
Patient survival after kidney transplantation from a deceased donor for Māori and non-Māori, non-Pacific recipients is shown in Figure 11.19. At 5 years after kidney transplantation from a deceased donor, 85% of Māori recipients and 91% of non-Māori, non-Pacific recipients were alive.

Figure 11.19
Patient Survival, Recipients of Primary Deceased Donor Kidney Transplants - Aotearoa New Zealand 2014-2023



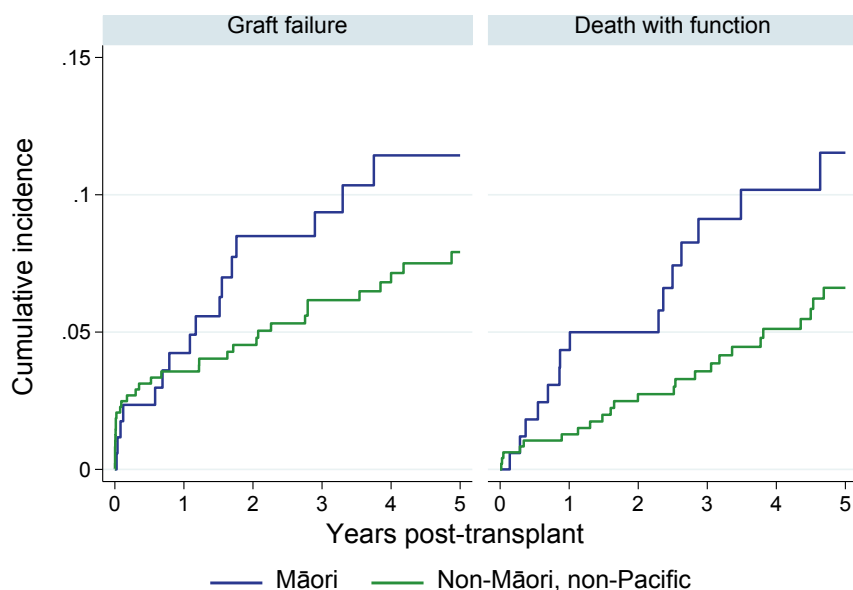
Over the first 5 years after a kidney transplant from a deceased donor, some kidney transplants are lost either through the transplant failing or the patient dying with a functioning kidney. The transplanted kidney is functioning at 5 years post-transplant in 78% of Māori recipients compared with 86% of non-Māori, non-Pacific persons (Figure 11.20).

Figure 11.20
Graft Survival, Recipients of Primary Deceased Donor Kidney Transplants - Aotearoa New Zealand 2014-2023



Cumulative incidence curves (utilising competing risk techniques to account for the effects of both components of graft loss, i.e. graft failure and death with a functioning graft) for Māori transplant outcomes are in Figure 11.21.

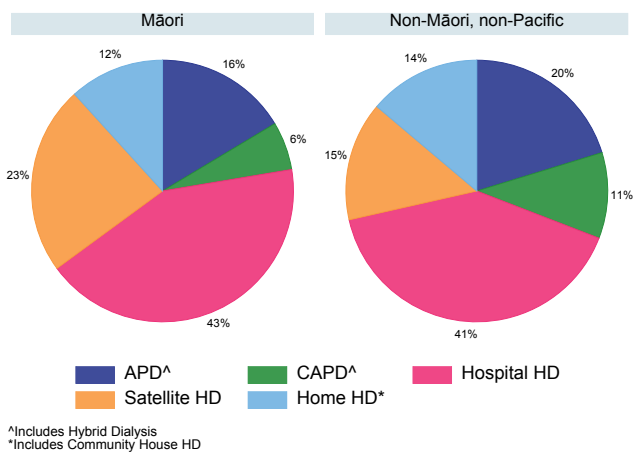
Figure 11.21
Transplant Outcomes, Aotearoa New Zealand - Primary Deceased Donor Kidney-only Transplants 2014-2023



DIALYSIS

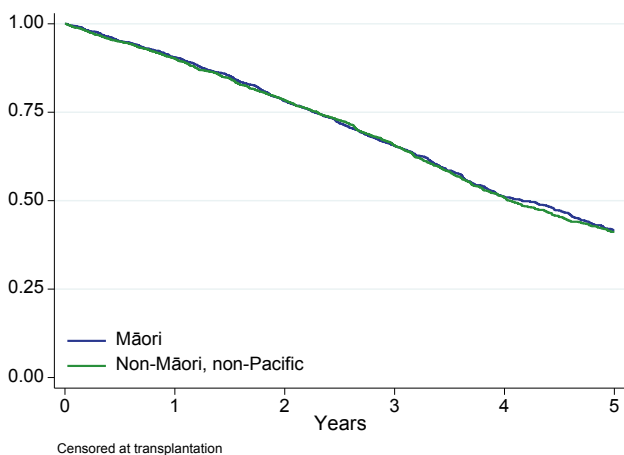
The distribution of dialysis modality is shown graphically in Figure 11.22. Māori patients had higher use of facility dialysis as the principal care modality, and lower use of the home-based modalities.

Figure 11.22
Dialysis Modality End 2023 - Aotearoa New Zealand, by Ethnicity



Patient survival after incident dialysis for Māori and Non-Māori, non-Pacific patients are in Figure 11.23. Non-Māori, non-Pacific and Māori cohorts experienced similar survival over 5 years after starting dialysis. However, the differences between populations including age distribution and access to competing treatments (transplantation), may impact mortality estimates.

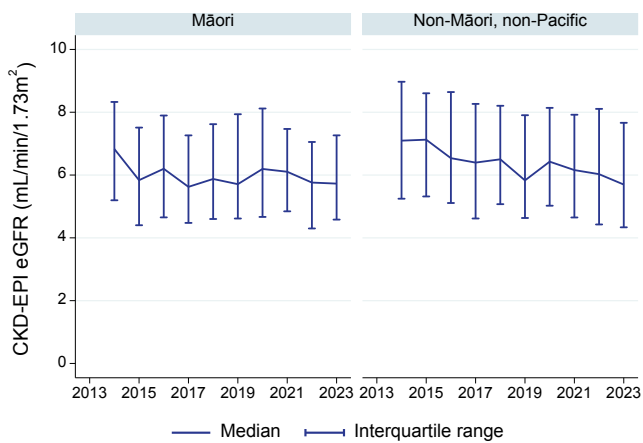
Figure 11.23
Patient Survival, Incident Dialysis Patients - Aotearoa New Zealand 2014-2023



TIMING OF DIALYSIS INITIATION

The level of kidney function at which dialysis is commenced (based on estimated Glomerular Filtration Rate (eGFR)) is shown in Figure 11.24 by patient ethnicity.

Figure 11.24
eGFR at Dialysis Initiation - Aotearoa New Zealand



LATE REFERRAL

The proportion of patients who experienced late referral (defined as the first assessment by a specialist nephrologist within 3 months of commencing dialysis) to specialist nephrology services in Aotearoa New Zealand, over 2019-2023 by ethnicity is in Table 11.5.

Table 11.5
Percentage of Late Referral by Ethnicity Aotearoa New Zealand 2019-2023

| Year | Māori | Non-Māori, non-Pacific |
|------|-------|------------------------|
| 2019 | 15% | 13% |
| 2020 | 15% | 7% |
| 2021 | 12% | 10% |
| 2022 | 15% | 13% |
| 2023 | 13% | 10% |

VASCULAR ACCESS

INCIDENT VASCULAR ACCESS

Incident vascular access data are presented in Table 11.6, and prevalent data in Table 11.7.

Table 11.6
Incident Vascular Access Aotearoa New Zealand 2019-2023

| Year | Vascular access | Māori | Non-Māori, non-Pacific |
|------|-----------------|-----------|------------------------|
| 2019 | AVF | 28 (21%) | 33 (24%) |
| | AVG | 0 (0%) | 2 (1%) |
| | CVC | 107 (79%) | 100 (74%) |
| | Not reported | 1 (1%) | 0 (0%) |
| 2020 | AVF | 22 (17%) | 31 (22%) |
| | AVG | 0 (0%) | 0 (0%) |
| | CVC | 106 (83%) | 106 (76%) |
| | Not reported | 0 (0%) | 2 (1%) |
| 2021 | AVF | 22 (17%) | 41 (24%) |
| | AVG | 0 (0%) | 1 (1%) |
| | CVC | 105 (83%) | 127 (75%) |
| | Not reported | 0 (0%) | 1 (1%) |
| 2022 | AVF | 17 (15%) | 44 (22%) |
| | AVG | 0 (0%) | 1 (1%) |
| | CVC | 95 (84%) | 150 (77%) |
| | Not reported | 1 (1%) | 1 (1%) |
| 2023 | AVF | 14 (11%) | 24 (13%) |
| | AVG | 1 (1%) | 2 (1%) |
| | CVC | 108 (88%) | 158 (86%) |
| | Not reported | 0 (0%) | 0 (0%) |

AVF: Arteriovenous Fistula, AVG: Arteriovenous Graft, CVC: Central Venous Catheter
17 excluded due to unreported ethnicity.

PREVALENT VASCULAR ACCESS

Table 11.7
Prevalent Vascular Access^a Aotearoa New Zealand 2019-2023

| Year | Vascular access | Māori | Non-Māori, non-Pacific |
|------|-----------------|-----------|------------------------|
| 2019 | AVF | 422 (63%) | 390 (57%) |
| | AVG | 18 (3%) | 16 (2%) |
| | CVC | 213 (32%) | 247 (36%) |
| | Not reported | 20 (3%) | 26 (4%) |
| 2020 | AVF | 411 (58%) | 376 (55%) |
| | AVG | 17 (2%) | 11 (2%) |
| | CVC | 251 (36%) | 263 (39%) |
| | Not reported | 27 (4%) | 28 (4%) |
| 2021 | AVF | 449 (60%) | 388 (51%) |
| | AVG | 11 (1%) | 11 (1%) |
| | CVC | 267 (36%) | 319 (42%) |
| | Not reported | 22 (3%) | 38 (5%) |
| 2022 | AVF | 397 (55%) | 380 (47%) |
| | AVG | 8 (1%) | 17 (2%) |
| | CVC | 287 (40%) | 362 (45%) |
| | Not reported | 27 (4%) | 43 (5%) |
| 2023 | AVF | 373 (52%) | 378 (44%) |
| | AVG | 8 (1%) | 18 (2%) |
| | CVC | 319 (45%) | 430 (50%) |
| | Not reported | 16 (2%) | 38 (4%) |

^aIncludes Hybrid Dialysis
44 excluded due to unreported ethnicity.

PATIENT FLOW

Table 11.8 shows the overall patient flow in Aotearoa New Zealand by ethnicity. Notably, mortality for Māori patients is 3 to 4-fold higher per million of the population compared with non-Māori, non-Pacific patients.

Table 11.8
Patient Flow (pmp) Aotearoa New Zealand 2019-2023

| Year | Event | Māori | Non-Māori, non-Pacific |
|------|-------------------------|-------------|------------------------|
| 2019 | New patients | 211 (253) | 289 (78) |
| | New transplants | 35 (42) | 156 (42) |
| | Pre-emptive transplants | 1 (1) | 30 (8) |
| | Prevalent dialysis | 920 (1104) | 1077 (289) |
| | Prevalent transplants | 252 (302) | 1632 (438) |
| | Total prevalence | 1172 (1406) | 2709 (727) |
| | Deaths | 200 (240) | 243 (65) |
| 2020 | New patients | 213 (249) | 323 (85) |
| | New transplants | 37 (43) | 127 (33) |
| | Pre-emptive transplants | 5 (6) | 36 (9) |
| | Prevalent dialysis | 961 (1125) | 1104 (290) |
| | Prevalent transplants | 267 (312) | 1701 (447) |
| | Total prevalence | 1228 (1437) | 2805 (737) |
| | Deaths | 161 (188) | 219 (58) |
| 2021 | New patients | 190 (217) | 339 (89) |
| | New transplants | 37 (42) | 117 (31) |
| | Pre-emptive transplants | 6 (7) | 33 (9) |
| | Prevalent dialysis | 974 (1113) | 1175 (310) |
| | Prevalent transplants | 283 (323) | 1746 (460) |
| | Total prevalence | 1257 (1437) | 2921 (769) |
| | Deaths | 157 (179) | 217 (57) |
| 2022 | New patients | 190 (213) | 338 (89) |
| | New transplants | 41 (46) | 106 (28) |
| | Pre-emptive transplants | 1 (1) | 21 (6) |
| | Prevalent dialysis | 937 (1052) | 1197 (317) |
| | Prevalent transplants | 296 (332) | 1769 (468) |
| | Total prevalence | 1233 (1384) | 2966 (785) |
| | Deaths | 213 (239) | 289 (77) |
| 2023 | New patients | 185 (205) | 318 (82) |
| | New transplants | 33 (37) | 110 (28) |
| | Pre-emptive transplants | 2 (2) | 23 (6) |
| | Prevalent dialysis | 921 (1019) | 1244 (321) |
| | Prevalent transplants | 312 (345) | 1798 (464) |
| | Total prevalence | 1233 (1364) | 3042 (785) |
| | Deaths | 190 (210) | 236 (61) |

Patients with unreported ethnicity are excluded.

[BACK TO CONTENTS](#)

CAUSE OF DEATH

The causes of death in 2023 are in Figure 11.25 and Table 11.9, stratified by ethnicity and modality at the time of death.

Figure 11.25
Cause of Death by Modality and Ethnicity - Deaths Occurring During 2023, Aotearoa New Zealand

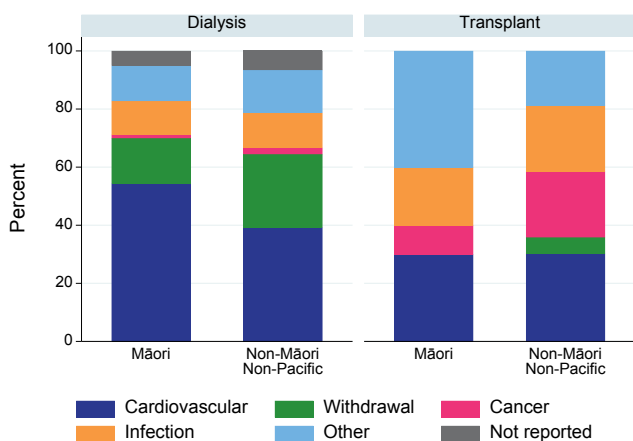


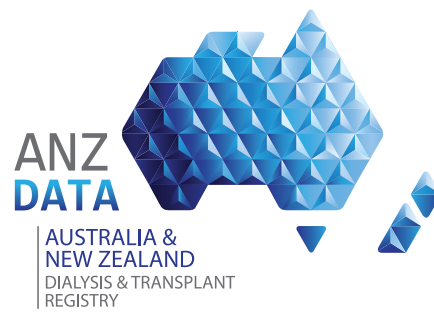
Table 11.9
Cause of Death by Modality and Ethnicity, Aotearoa New Zealand 2023

| Modality | Cause of death | Māori | Non-Māori, non-Pacific |
|------------|----------------|----------|------------------------|
| Dialysis | Cardiovascular | 98 (54%) | 72 (39%) |
| | Withdrawal | 28 (16%) | 46 (25%) |
| | Cancer | 2 (1%) | 4 (2%) |
| | Infection | 21 (12%) | 22 (12%) |
| | Other | 22 (12%) | 27 (15%) |
| | Not reported | 9 (5%) | 12 (7%) |
| | Total | | 180 |
| Transplant | Cardiovascular | 3 (30%) | 16 (30%) |
| | Withdrawal | 0 (0%) | 3 (6%) |
| | Cancer | 1 (10%) | 12 (23%) |
| | Infection | 2 (20%) | 12 (23%) |
| | Other | 4 (40%) | 10 (19%) |
| | Not reported | 0 (0%) | 0 (0%) |
| | Total | | 10 |

2 excluded due to unreported ethnicity.

REFERENCES

1. This work is based on/includes Stats NZ's data which are licensed by Stats NZ for re-use under the Creative Commons Attribution 4.0 International licence. Stats NZ, 2023, Estimated Resident Population by Age and Sex (1991+) (Annual-Jun), NZ Infoshare, viewed 14 Dec 2023, <http://infoshare.stats.govt.nz/>
2. Australian Bureau of Statistics, 2019, Australian Standard Classification of Cultural and Ethnic Groups (ASCCEG), December 2019, viewed 23 Oct 2020, <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1249.0Main+Features12019?OpenDocument>



CHAPTER 11

Kidney Failure among Māori in
Aotearoa New Zealand