

# Queensland Health Hepatitis C Treatment Progress Report: Monitoring uptake of hepatitis C treatment in Queensland 1 March 2016 – 31 December 2017

**March 2019**

## Queensland Health Hepatitis C Treatment Progress Report

Published by the State of Queensland (Queensland Health), March 2019



This document is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit [creativecommons.org/licenses/by/3.0/au](https://creativecommons.org/licenses/by/3.0/au)

© State of Queensland (Queensland Health) **2019**

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:

Blood-Borne Virus and Sexually Transmissible Infections Unit, Communicable Diseases Branch, Department of Health, GPO Box 48, Brisbane QLD 4001, email [BBVCDU@health.qld.gov.au](mailto:BBVCDU@health.qld.gov.au), phone +61 7 3328 9800

### Disclaimer:

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.

## Introduction

This report monitors progress on implementation of the *Queensland Hepatitis C Action Plan 2016–2021*. Data were obtained from a number of sources including: the Queensland Notifiable Conditions register (NoCS); Pharmaceutical Benefits Scheme (PBS); Australian Government, Department of Health; the Kirby Institute, University of New South Wales; and directly from treating clinicians.

The goal of the *Queensland Hepatitis C Action Plan 2016–2021* is to increase the proportion of Queenslanders diagnosed with chronic hepatitis C who have undergone treatment to 50 per cent by 2021.

Viral hepatitis is the leading cause of liver cancer and the most common reason for liver transplantation in Australia. Treatment of affected populations will improve health outcomes and prevent transmission.

The Kirby Institute, University of New South Wales, estimated there were **47,356** Queenslanders living with hepatitis C at the beginning of 2016, with a prevalence of 0.94 per cent for the Queensland population.

In March 2016, the Commonwealth Government listed a number of direct acting anti-viral (DAA) treatments for chronic hepatitis C on the PBS. These new treatments are all oral regimes with negligible side effects and are highly effective with an over 97 per cent cure rate.

As the DAAs are co-listed as s85 and s100 medications, they can be prescribed by both general practitioners and other specialists. This makes provision of hepatitis C treatment in primary care easier. A focus on scaling up access to hepatitis C treatment in primary care will improve community access and allow the public health system to focus on treating the more complex cases (e.g: people with advanced liver disease) and vulnerable populations including: people in custodial settings; people who currently inject drugs; people receiving Opioid Substitution Treatment; Aboriginal and Torres Strait Islander people; people who are homeless; and people with mental health issues.

To facilitate a successful transfer of hepatitis treatment provision from public hospital outpatients to primary care settings, it is important that Hospital and Health Services (HHSs) and Primary Health Networks (PHNs) adequately support general practitioners in the assessment and treatment of people with chronic hepatitis C. This is occurring through a number of local initiatives.

## Summary

- 11,576 Queenslanders with chronic hepatitis C were treated in the period 1 March 2016 to 31 December 2017\*. This represents 24.4 per cent of the 47,356 individuals estimated to be living with hepatitis C at the beginning of 2016.
- From 2017 to 2018 there was a nine per cent decline in hepatitis C notifications. Newly acquired hepatitis C notifications rose slightly (from 313 to 329) offset by a 11 per cent decline in notifications of unspecified hepatitis C infections (from 2041 to 1825).
- In 2018, 56 per cent of newly acquired hepatitis C notifications were received from correctional centres.
- HHSs with responsibility for provision of prisoner health services are engaged in local initiatives to improve the diagnosis and treatment of hepatitis C in the prison population. Based on data provided by clinicians treating hepatitis C in prison settings, 1,384 inmates had been treated by 31 December 2018.
- Most Sexual Health Services (SHSs) were engaged in the provision of hepatitis C testing and treatment, often in collaboration with Alcohol and Other Drug Services (AODS). In some instances, SHSs were engaged in the provision of hepatitis C treatment to prison inmates through in-reach projects and the use of telemedicine.
- Among Queensland Needle and Syringe Program (NSP) attendees participating in the 2017 Australian NSP Survey who reported active hepatitis C infection, 36 per cent reported having received treatment in the prior 12 months. Overall, 44 per cent of eligible participants had ever received treatment.
- Continued improvement to NSPs, opioid treatment programs and harm reduction services more generally is critical for the continued prevention of hepatitis C transmission and the prevention of reinfection following successful treatment.
- Ensuring access to, or provision of hepatitis C treatment are service requirements under the AOD Clinical Services Capability Framework for HHSs AODS rated as levels four, five and six.

\* Based on delayed PBS dispensing data supplied by the Australian Government, Department of Health.

**Table 1: Estimated number of people living with hepatitis C in Queensland, by HHS, at the beginning of 2016**

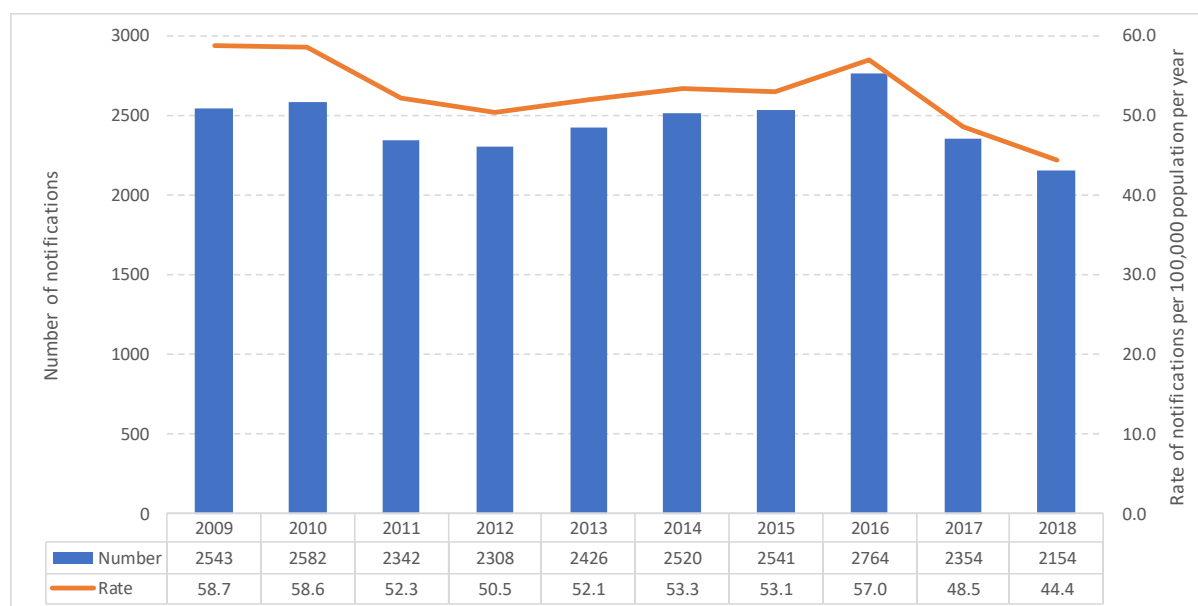
HHS of residence	Notifications of hepatitis C 1990–2015	% of Queensland notifications	Estimated number of people living with hepatitis C at the beginning of 2016*
Cairns and Hinterland	5,435	8.14%	3,854
Central Queensland	2,326	3.48%	1,649
Central West	91	0.14%	65
Darling Downs	2,571	3.85%	1,823
Gold Coast	9,038	13.53%	6,409
Mackay	1,789	2.68%	1,269
Metro North	12,304	18.42%	8,725
Metro South	17,695	26.50%	12,548
North West	360	0.54%	255
South West	209	0.31%	148
Sunshine Coast	5,365	8.03%	3,804
Torres and Cape	328	0.49%	233
Townsville	2,892	4.33%	2,051
West Moreton	3,296	4.94%	2,337
Wide Bay	3,045	4.56%	2,159
Overseas	37	0.06%	26
<b>Queensland</b>	<b>66,781</b>	<b>100.00%</b>	<b>47,356*</b>

\* The total estimated number of 47,356 people living with hepatitis C made by the Kirby Institute allocated to individual HHS areas based on the distribution of hepatitis C notifications from 1990 to 2015.

- The estimated number of people living with hepatitis C is based on notification data which provides only limited information that can be used for assessing the epidemiological patterns of hepatitis C infection. This is because many infections are asymptomatic, so people who are infected may never be tested, or only tested many years after infection. Variations in notifications may also reflect differences in testing patterns rather than differences in incidence of infection.
- Notification data is largely historical, dating back to 1990, and individuals may no longer be resident in the HHS in which they were notified.
- It is unclear how many individuals were successfully treated with interferon based regimes prior to the availability of DAA medications.
- In addition to the estimated 47,356 cases people who have contracted hepatitis C up to 2016, there are on average, a further 2,000 hepatitis C notifications received annually, with 75 per cent most likely to be chronic cases.

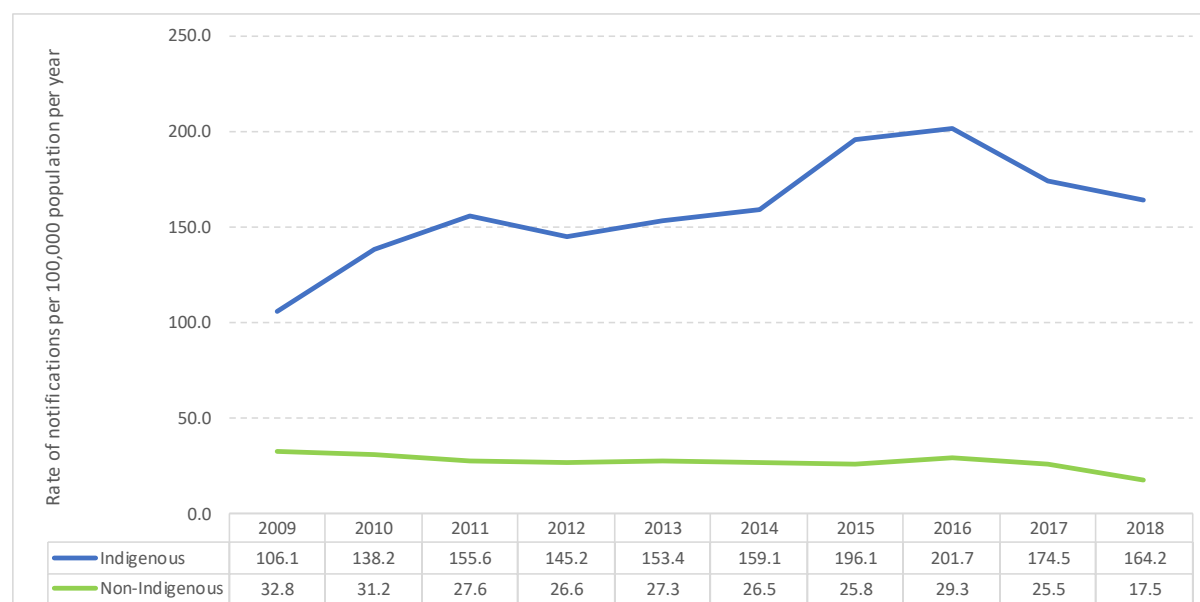
# Hepatitis C notifications

**Figure 1: Number and rate of hepatitis C notifications in Queensland, 2009-2018**



- Following a peak in 2016, notifications of hepatitis C have declined over the past two years. The notification rate is now at its lowest rate in the past decade.
- Decreasing hepatitis C notification rates are seen in to both males and females, however the notification rate among males in 2018 was almost three times higher than the rate among females.
- Over the past decade, the majority of hepatitis C notifications have been among individuals aged 30-49 years.

**Figure 2: Rate of hepatitis C notifications in Queensland, by Aboriginal and/or Torres Strait Islander status, 2009-2018**



- The rate of hepatitis C notification among people who identified as Aboriginal and/or Torres Strait Islander is nine times higher than among non-Indigenous people.
- In 2018, there were 350 hepatitis C notifications in people who identified as Aboriginal and/or Torres Strait Islander compared to 812 non-Indigenous people; in addition, Aboriginal and/or Torres Strait Islander status was unknown for 992 cases in 2018.
- While there has been some improvement in reporting Aboriginal and/or Torres Strait Islander status, there remains a substantial number of cases where Aboriginal and/or Torres Strait Islander status is unknown.

**Table 2: Number of hepatitis C (newly acquired) notifications in Queensland, by HHS area of residence and prison, 2016-2018**

HHS of residence/Prison	2016	2017	2018
Cairns and Hinterland	8	11	10
Central Queensland	5	13	10
Central West	0	0	0
Darling Downs	17	11	14
Gold Coast	12	10	8
Mackay	4	1	8
Metro North	40	32	27
Metro South	44	26	30
North West	3	1	2
South West	2	2	4
Sunshine Coast	7	7	7
Torres and Cape	0	0	0
Townsville	19	10	13
West Moreton	12	10	7
Wide Bay	11	5	6
Prison	190	174	183
<b>Queensland total</b>	<b>374</b>	<b>313</b>	<b>329</b>

- As laboratory tests do not distinguish between hepatitis C acquired recently or in the past, newly acquired cases are those where there is evidence within the past two years, of previous hepatitis C negative status.
- Prisons accounted for 56 per cent of all notifications of newly acquired hepatitis C in 2018. This may be due to an increased emphasis on screening for hepatitis C following availability of DAA medications for prison inmates, and the high-risk behaviours of prison populations. In contrast, Metro North and Metro South combined, both HHSs with large AODS, accounted for 17 per cent of all newly acquired hepatitis C notifications in 2018
- Newly acquired hepatitis C notifications increased in 2018, albeit by a small number (16 cases).



**Table 3: Number of hepatitis C (unspecified) notifications in Queensland, by HHS area of residence and prison, 2016-2018**

<b>HHS of residence/Prison</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Cairns and Hinterland	184	158	148
Central Queensland	81	84	73
Central West	7	2	5
Darling Downs	120	102	76
Gold Coast	271	209	160
Mackay	66	65	52
Metro North	361	287	255
Metro South	415	349	318
North West	7	14	10
South West	15	8	14
Sunshine Coast	153	134	100
Torres and Cape	13	8	10
Townsville	84	90	72
West Moreton	119	93	92
Wide Bay	161	132	109
Prison	333	132	109
<b>Queensland total</b>	<b>2390</b>	<b>2041</b>	<b>1825</b>

- In contrast to notifications of newly acquired hepatitis C (table 2); from 2016-2018 prisons accounted for nine per cent of notifications of unspecified hepatitis C.
- The proportion of notifications of unspecified hepatitis C from prisons, has declined from 14 per cent of the total in 2016 to six per cent in 2018.
- There has been a rapid decline in notifications of unspecified hepatitis C following a peak in 2016.

**Table 4: Demographic characteristics of notified hepatitis C cases in prisoners, 2014-2018**

Characteristic	2014	2015	2016	2017	2018
Sex					
Male	353	390	444	425	465
Female	51	58	79	55	49
Age group (years)					
15-29	222	259	313	275	291
30-49	164	180	201	191	211
50+	18	9	9	14	12
Indigenous status					
Indigenous	87	141	159	118	126
Non-Indigenous	110	117	200	192	176
Unknown	207	190	164	170	212
<b>Total</b>	<b>404</b>	<b>448</b>	<b>523</b>	<b>480</b>	<b>514</b>

- Prisoners diagnosed with hepatitis C are younger than those from the rest of the community. This is likely to be an indication of more recently acquired infection as hepatitis C infection tends to be acquired soon after initiation of injecting drug use.
- For prisoners whose Aboriginal and/or Torres Strait Islander status was known, 42 percent of those diagnosed in 2018 were Aboriginal and/or Torres Strait Islander inmates. In 212 cases Aboriginal and/or Torres Strait Islander status was unknown or unspecified.
- As in the community, while there has been some improvement in reporting Aboriginal and/or Torres Strait Islander identification, there remains a substantial number of cases where Aboriginal and/or Torres Strait Islander status is unknown.
- All prisons have arrangements in place with HHS based specialist services to provide prisoners with access to hepatitis C treatment. By the end of 2018 1,384 inmates had been treated through such arrangements.
- Delivery of health services in correctional settings is complex. The prison population is constantly in a state of flux as inmates enter prison, are transferred between facilities or are released.

# Uptake of Hepatitis C treatment

**Table 5: Number of people initiating DAA treatment\*, by HHS, by quarter\*\*, 1 March 2016 to 31 December 2017**

HHS of residence	2016 Mar-Jun	2016 Jul-Sep	2016 Oct-Dec	2017 Jan-Mar	2017 Apr-Jun	2017 Jul-Sep	2017 Oct-Dec	Total	Treatment uptake rate
Cairns and Hinterland	441	121	79	90	116	76	59	982	25.5%
Central Queensland	107	68	55	59	66	52	53	460	27.9%
Central West	5	1	2	1	5	0	1	15	23.1%
Darling Downs	166	83	58	62	70	40	46	525	28.8%
Gold Coast	580	258	164	171	260	170	101	1,704	26.6%
Mackay	149	55	31	37	53	33	17	375	29.6%
Metro North	740	256	195	196	265	191	166	2,009	23.0%
Metro South	759	272	251	246	315	278	212	2,333	18.6%
North West	20	6	4	4	3	3	4	44	17.3%
South West	4	4	7	4	13	7	3	42	28.4%
Sunshine Coast	408	155	112	103	196	108	78	1,160	30.5%
Torres and Cape	14	4	4	1	5	3	3	34	14.6%
Townsville	202	67	49	32	65	39	45	499	24.3%
West Moreton	213	93	52	67	106	92	64	687	29.4%
Wide Bay	227	92	60	78	118	73	59	707	32.7%
<b>Queensland</b>	<b>4035</b>	<b>1,535</b>	<b>1,123</b>	<b>1,151</b>	<b>1,656</b>	<b>1,165</b>	<b>911</b>	<b>11,576</b>	<b>24.4%</b>

\* Numbers presented in this table may vary from the previous report due to improved counting of individual patients in the PBS dispensing data.

\*\* The first quarter (March-June 2016) contains four months

- From 1 March 2016 to 31 December 2017 a total 11,576 patients had been treated for hepatitis C in Queensland, based on Commonwealth PBS dispensing data. This represents approximately 24 per cent of the 47,356 Queenslanders estimated to be living with hepatitis C at the beginning of 2016.
- It is noted that while treatment provision in the remote HHSs has its challenges, the small number of people estimated to be living with hepatitis C in those locations increases the variation in estimates of treatment uptake.
- A number of local initiatives have been developed by specialist HHS services to improve community access to hepatitis treatment and support general practitioners to prescribe hepatitis C treatment. The General Practitioner with Special Interest collaboration between Gold Coast Liver Clinic and Gold Coast PHN; the Metro North CURE-IT project operated through Prince Charles Gastroenterology; the Sunshine Coast-Wide Bay Regional Hepatitis Partnership and the Cairns Hep C Free by 2020 campaign have all resulted in substantial numbers of individuals being treated.

- In 2017, an estimated 42 per cent of Queensland Needle and Syringe Program (QNSP) attendees tested positive to hepatitis C. The sharing of injecting equipment by people who inject drugs is the largest, if not the only risk factor for the transmission of new infections. At the current time, only a few AOD services appear to be directly providing hepatitis C testing and treatment to NSP attendees, with the majority referring clients to Sexual Health Services (SHSs).
- Among Queensland participants in the 2017 Australian NSP Survey who reported active hepatitis C infection, 36 per cent reported having received treatment in the prior 12 months compared to 27 per cent in 2016. This compares to two per cent per annum receiving treatment from 2012 to 2015 (prior to the availability of DAA treatment).
- In 2017, the majority of SHSs were engaged in the provision of hepatitis C testing and treatment, often in collaboration with AOD services. In some instances, SHSs were engaged in the provision of hepatitis C treatment to prison inmates through in-reach projects and use of telemedicine.
- The goal of the *Queensland Hepatitis C Action Plan 2016–2021*, to increase the proportion of Queenslanders diagnosed with chronic hepatitis C who have undergone treatment to 50 per cent by 2021 will not be met unless the number of patients being treated consistently returns to the level seen in July/September 2016.