NI Regional Hepatitis B & C Managed Clinical Network Annual Report 2021

An analysis of data for the year 2020





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Interpretation of 2020 data

The 2020 Hepatitis B and C surveillance data needs to be interpreted with some caution, particularly when making comparisons to other time periods.

There were major changes in access to testing and services, as well as changes in behaviour, due to the COVID-19 pandemic.

The antenatal screening programme continued, however screening other at-risk populations was reduced as face to face appointments were paused or reduced.





Hepatitis B & C surveillance in NI

Sources of data and surveillance arrangements

- Hepatitis B is a notifiable disease under the 1965 Public Health Act.
- Hepatitis C was not a notifiable disease during 2020, therefore reporting was voluntary.
- Cases are notified to the PHA from the Regional Virology Laboratory, Public Health England, Northern Ireland Blood Transfusion Service (NIBTS), and clinicians including trust antenatal screening co-ordinators.





Hepatitis B surveillance in NI

Summary

- There was a 36.5% decrease in the number of new Hepatitis B infections reported by the Regional Virology Laboratory in 2020 (n=73) when compared with 2019 (n=115).
- Of these, two thirds (67%) of cases were in the 15-44 year age group. The number of children diagnosed between 1-14 years of age has remained very low.
- Around one third (34%) of cases were female and two thirds (66%) were male.
- There were 23 pregnant women who tested positive for hepatitis B in 2020; 7 were new diagnoses. This compares with 38 positive pregnant women and 22 new diagnoses in 2019.
- Vaccination coverage for three doses of DTaP/IPV/Hib/HepB vaccine by 12 months of age for April 2019- April 2020 was 94.4%.





Figure 1: Laboratory confirmed reports of Hepatitis B, 2010 - 2020, Northern Ireland



Source: Regional Virology Laboratory/PHA





Figure 2: Laboratory confirmed reports of Hepatitis B, by age group, 2010 - 2020, Northern Ireland



Source: Regional Virology Laboratory/PHA





Hepatitis C testing in NI

Hepatitis C testing is performed by the Regional Virology Laboratory (RVL) and Public Health England (PHE).

A year on year increase in Hepatitis C testing in the RVL was observed from 2015 to 2019. During 2020, there was an 50.1% reduction in tests sent for Hepatitis C testing, 27,621 compared to 55,367 in 2019. See figure 3.

Robust information is not currently available on the number of tests performed by PHE.





Figure 3: Hepatitis C test requests to Regional Virology Laboratory, 2015 - 2020, Northern Ireland



Source: RVH local database/ Regional Virology Laboratory





Hepatitis C epidemiology in 2020

- In 2020, 124 positive results were reported, a small decrease of 3.8% compared to 2019.
- 66% of cases were male, 34% female.
- 85% of cases were 15-44 years of age.

*Prior to 2017, both PCR and antibody positive results were reported as a positive Hepatitis C result, which could have been either an active or a previous infection. From 2017 onwards, only PCR positive results are reported (i.e. active infections only).





Figure 4: Laboratory confirmed reports of Hepatitis C, 2010 - 2020, Northern Ireland



Source: Regional Virology Laboratory/PHA/PHE



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Figure 5: Laboratory confirmed reports of Hepatitis C by age group, 2010 - 2020, Northern Ireland



Source: Regional Virology Laboratory/PHA/PHE





Cluster of Hepatitis C infections

During 2020, a cluster of genotype 1a Hepatitis C infections in Belfast was identified on whole genome sequencing (WGS). Epidemiological investigation identified a number of key risk factors, in particular injecting drugs: heroin and cocaine. The injection of cocaine is a new trend.

Between 1st January 2017 to 31st December 2020, 59 confirmed cases have been linked to the cluster.

Six people were co-infected with HIV.

Two thirds of the cluster are male. 41% are aged 20-29 with an average age of 30.





Cluster of Hepatitis C infections

The cluster is being managed by a multi-agency outbreak control team, and there is an overarching PHA and HSCB joint action plan to tackle the outbreak.

Key control measures include:

- Awareness raising
- Harm reduction education
- Enhanced needle and syringe exchange provision
- Case finding through outreach testing
- Treatment as prevention







Clinical activity associated with Hepatitis C during 2020

Regional Hepatitis B and C Managed Clinical Network







Interpretation of 2020 data

Due to the COVID-19 pandemic, the 2020 Hepatitis C activity data needs to be interpreted with some caution.

A 'Stay at Home' order was announced on 23rd March 2020. On the 28th March 2020, new regulations came into force in Northern Ireland giving authorities enforcement powers. Restrictions were gradually eased from 18th May 2020, however guidance on social distancing continued throughout 2020.

During 2020, there was significantly reduced capacity for Hepatitis C treatments as staff were redeployed to acute clinical work, and outpatient clinics cancelled. Once clinics restarted, requirements for social distancing meant the clinics had to operate at reduced capacity.





Referrals

During 2020, there was a 12% decrease in referrals for Hepatitis C, with 145 referrals received, compared to 165 in 2019.

Most referrals (83%;120/145) were for patients who were newly diagnosed with Hepatitis C during 2020. Of those referred, seven individuals died, ten left Northern Ireland and eight spontaneously cleared the virus.

Referrals were received from all Trust areas, with the Belfast and South Eastern Trust providing the largest number of referrals (Figure 6).

Of those referred, 27% did not attend for specialist review of their Hepatitis C status.





Figure 6: Referrals received for specialist assessment of Hepatitis C by Trust area, 2015 – 2020, Northern Ireland



Source: RVH local database/ Regional Virology Laboratory





Hepatitis C Treatment Initiations

Hepatitis C treatment initiations increased substantially from 2014 (n=42) to a peak in 2018 (n=203). During 2019, treatment initiations fell to 123, reflecting that the waiting list was largely cleared.

During 2020, 68 patients were treated for Hepatitis C, due to reallocation of resources during the COVID-19 pandemic (Figure 7).

Three quarters (51/68) of patients were treated in outreach clinics in Inclusion Health, Drugs and Alcohol, and Healthcare in Prison services. There were seven (10%) individuals who were assessed and offered treatment but did not attend.





Figure 7: Hepatitis C treatment initiations, 2010 - 2020, Northern Ireland



Source: RVH local database 2021





Impact of COVID-19

COVID-19 appears to have had an impact on both the number of patients referred for HCV treatment and the number started on treatment. In 2019, there were 165 new referrals to the Regional Liver Unit that manages all cases of HCV in Northern Ireland. In the same year, 123 patients were commenced on treatment. There is normally a lag of several weeks between number referred and number starting treatment.

In 2020 there was normal activity in January and February but March to August saw a substantial reduction in number of patients referred to the service (53 instead of 84) and the number started on treatment (21 instead of 60). By September 2020, the service had returned to normal in terms of referrals and treatments per month but there was a second dip in October with the second COVID surge.





Figure 8: Number of referrals received and number of cases treated, per month, Jan - Dec 2020, Northern Ireland



Source: RVH local database 2021





Table 1: Risk factors for HCV transmission recorded by patients presenting for treatment,2020, Northern Ireland

Risk factors recorded by patients	Number (%)
People who inject drugs (PWID)	97 (58%)
Sex	*
Tattoo	*
Overseas healthcare	8 (5%)
Other	*
Unknown/Not recorded	49 (30%)
TOTAL	165

Source: Regional Hepatology Unit, Belfast City Hospital, BHSCT 2020 * Numbers suppressed due to small cell sizes





Table 2: Cases of HIV and Hepatitis C co-infection diagnosed in cases referredto the Regional Liver Clinic, 2014 - 2020, Northern Ireland

Year	Number with co-infection
2014	8
2015	*
2016	*
2017	6
2018	*
2019	7
2020	5

Source: Regional Hepatology Unit, Belfast City Hospital, BHSCT 2020 *Number suppressed due to small cell size







Summary

During 2020, the COVID-19 pandemic had a significant impact on efforts to eliminate Hepatitis B and C, with reductions in: testing, rates of new diagnoses, referrals to clinical services and treatments.

Hepatitis B and C continue to predominantly affect young adults, and males more than females. The most common risk factor for Hepatitis C infection continues to be injection of drugs, and evidence of injecting cocaine has emerged.

The number of new cases of Hepatitis B diagnosed was the lowest level in the last 10 years, and fell by 39% compared to 2019. Uptake of the Hepatitis B vaccination programme for infants remains stable.

Hepatitis C testing reduced by half, however there was only a small decrease in the number of new cases diagnosed. This may have been because the testing was targeted effectively at those at highest risk.







A cluster of Hepatitis C infections was detected in Belfast in young adults linked to injecting heroin and cocaine. The cluster is being managed by a multi-agency outbreak control team.

There has been a shift to treatment in more accessible outreach settings, such as Inclusion Health, Drugs and Alcohol, and Healthcare in Prison services.





Recommendations

Further investigation is required in to the changing patterns of injecting drug use to inform harm reduction measures.

Continued effort is required to tackle the cluster of hepatitis C and HIV infections, including targeted support for those at highest risk.

As we enter the recovery phase from the COVID-19 pandemic, a renewed focus on Hepatitis B and C elimination is required in order to meet the targets.

If there is a future requirement for population level non-pharmaceutical interventions to control the spread of a pandemic disease such as COVID-19, mitigations need to be put in place to reduce the risks to vulnerable people, including supporting access to harm reduction services, and face to face clinical services.





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Further information is available at:

https://www.hepbandcni.net/

https://www.publichealth.hscni.net/directorate-public-health/hepatitis





