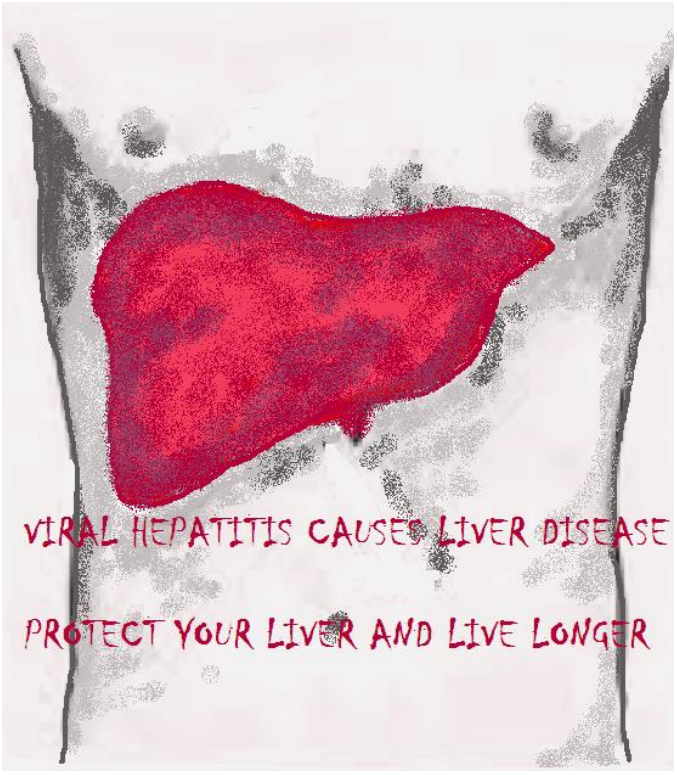
NI REGIONAL HEPATITIS B&C MANAGED CLINICAL NETWORK ANNUAL REPORT 2016



FOREWORD

We are delighted to present the 2016 report of the Northern Ireland Hepatitis B & C Managed Clinical Network.

Although the numbers of people infected with hepatitis B and C in Northern Ireland are low relative to other areas of the world, they are diseases that disproportionately affect disadvantaged or marginalized members of society and can lead to severe chronic liver disease. Members of the Northern Ireland Hepatitis B and C managed clinical network are working closely with statutory and voluntary organisations to disseminate information and training with the aim that more people will come forward for testing and referral for assessment.

There is still more to be done but we would like to thank everyone involved for their commitment and hard work over the past year.

With new highly effective treatments becoming available for hepatitis C and an effective vaccine available for hepatitis B this is an exciting time with the opportunity to see real decreases in the number of people affected by these diseases and we will continue to work towards this aim in the coming year

Dr Lucy Jessop
Chair of Managed Clinical Network

Dr Neil McDougall
Clinical Lead

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THE AIMS AND OBJECTIVES OF THE NETWORK

The overall aim of the Northern Ireland Hepatitis B & C Managed Clinical Network is to reduce the impact of HBV and HCV on the population of Northern Ireland by strengthening current services through improved joint working across disciplines.

The specific objectives of the Hepatitis B&C MCN in Northern Ireland are:

- To promote increased awareness and understanding of hepatitis B&C infection and transmission among identified risk groups, health and social care providers and the general public;
- To develop robust surveillance arrangements for use in profiling the epidemiology of hepatitis B & C infection and its associated risk factors;
- To facilitate the development of programs for the prevention of hepatitis B & C targeted at identified risk factors and high risk groups;
- To optimize the identification and diagnosis of hepatitis B & C infection in individuals at risk of acquiring such infection in Northern Ireland;
- To facilitate the delivery of hepatitis B & C services that are equitable, patient-centered, informed by local epidemiology and based on best evidence;
- To optimize the treatment and ongoing care of individuals identified as having hepatitis B & C infection;
- To facilitate the inclusion of patients where possible and clinicians in current and future hepatitis B & C service delivery/development;
- To encourage cyclical audit/assessment of hepatitis B & C services provided, promote further research in this area and maximize use of learning arising;
- To provide a forum for continuous professional development, shared learning and multidisciplinary discussion;
- To produce an annual report on hepatitis B & C infections and services provided for same in Northern Ireland.

Full details of the constitution and terms of reference for the Network are available at www.hepbandcni.net.

Hepatitis B virus (HBV) is a blood borne virus that can cause serious liver disease, however a safe and effective vaccine is available to protect individuals from infection. Hepatitis B virus is transmitted between people by contact with the blood or other body fluids (i.e. semen and vaginal fluid) of an infected person. Hepatitis B is transmitted parenterally and sexually. Transmission most commonly occurs following sexual intercourse, as a result of blood to blood contact, including injury with contaminated sharp instruments or other equipment by people who inject drugs or by perinatal transmission from mother to child.

Modes of transmission are the same for the human immunodeficiency virus (HIV), but HBV is 50 to 100 times more infectious. Unlike HIV, HBV can survive outside the body for at least 7 days. During that time, the virus can still cause infection if it enters the body of a person who is not infected (CDC 2009)

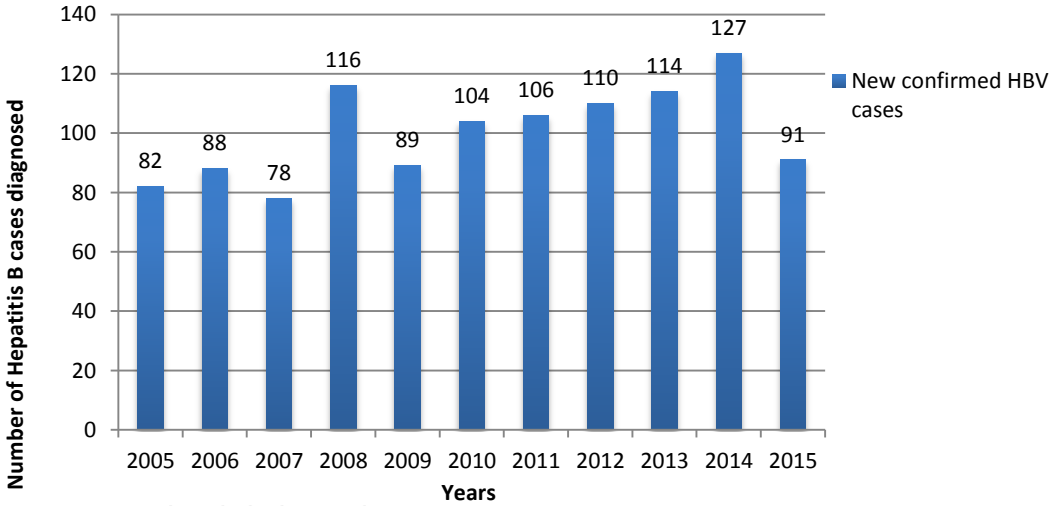
THE EPIDEMIOLOGY OF HEPATITIS B IN NORTHERN IRELAND 2005-2015

Northern Ireland is a very-low prevalence country for HBV with an average of 80 -120 new cases being diagnosed every year. In Northern Ireland, a total of 91 Hepatitis B infections were reported in 2015, 19 of which were acute infection and 72 chronic infections, of this 11 were new antenatal cases

Some of these infections will have been related to sexual transmission or injecting drug use; however, risk factor information is not available for the majority of cases. The age group most affected is the 15-44 year old with 80% of those infected falling in this age group.

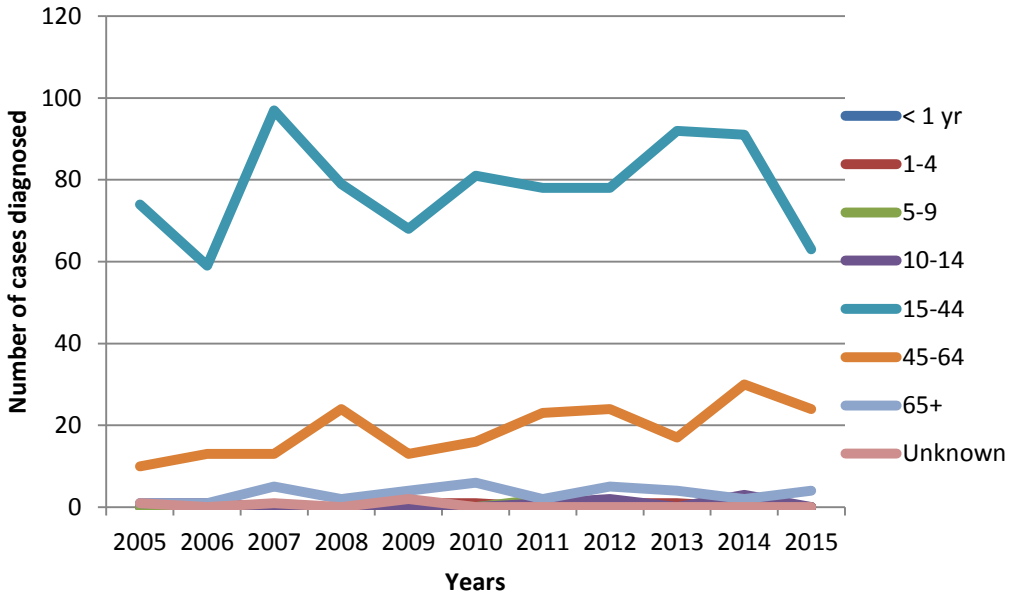
Certain ethnic groups living in Northern Ireland have strong links with parts of the world with high rates of HBV infection (sub-Saharan Africa, most of Asia, the Pacific, the Amazon, the southern parts of Eastern and Central Europe and the Middle East) and are particularly vulnerable to on-going risk of HBV transmission.

Figure 1: New Laboratory-confirmed cases of hepatitis B in Northern Ireland, 2005 – 2015



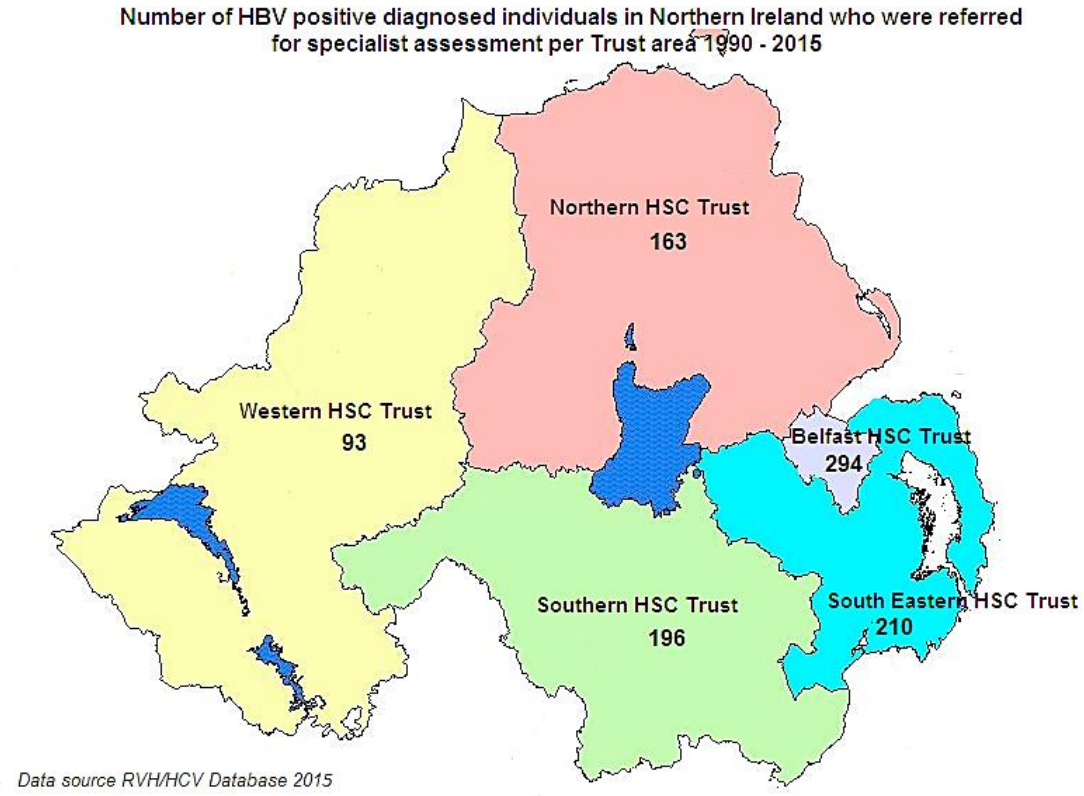
Source: - Regional Virology Laboratory; PHA 2015

Figure 2: ***Laboratory reports of Hepatitis B by age group 2000 -2015***



The majority of confirmed cases of Hepatitis B in Northern Ireland were in persons aged between 15 - 64 years of age. 63 of the 91 cases diagnosed in 2015 were aged between 15 -44.

Referrals for specialist assessment at the RVH Liver Clinic



Treatments for Hepatitis B

All treatment of Chronic Hepatitis B in NI is based at the Royal Victoria Hospital Liver Unit. Patients are treated in line with NICE guidelines (NICE CG165) using either Pegylated Interferon alpha-2a for up to 48 weeks or oral antiviral therapy. In addition, the antenatal hepatitis B pathway results in treatment of 2-3 women per year with oral antiviral therapy in the last trimester of pregnancy to reduce the risk of transmission of hepatitis B to the neonate.

Antenatal: - Referral Pathway Audit

The Infectious Diseases in Pregnancy Screening (IDPS) programme recommends that all pregnant women are offered screening for hepatitis B infection in each pregnancy[1] with subsequent appropriate action for both the neonate and mother. It further recommends that women who are hepatitis B positive are referred and seen by an appropriate specialist within an effective timeframe (6 weeks from identification) - *UK National Screening Committee (2010).*

In 2010, an audit of all antenatal detected HBsAg positive mothers in Northern Ireland showed that 51% were not seen at an appropriate specialist service. In 2011 a protocol was put in place to ensure that all HBsAg positive mothers in NI are referred to the Liver Unit, RVH and seen within 6 weeks (or before deliver if late presentation) for specialist advice and treatment if indicated. Since 2010 there has been a significant improvement in referral rates, with more than 97% of women with chronic hepatitis B detected through antenatal screening now being referred to appropriate specialist Hepatology services and 93% of these women being seen at the liver clinic within 6 weeks of being referred.

Hepatitis B: - referral for specialist assessment

Notifications of acute and chronic hepatitis B are reported to the duty room of the Public Health Agency (PHA) in Northern Ireland. PHA recommends a suite of actions that include all patients with chronic hepatitis B being advised to be referred for specialist follow up to hepatology or gastroenterology. The regional hepatology service and PHA were keen to audit the numbers referred for follow up. 97% of individuals newly diagnosed with chronic Hepatitis B in 2015 have been referred for specialist assessment. The 3% not referred had either left Northern Ireland or were not registered with a GP. This means that all patients registered with a GP in Northern Ireland and diagnosed with chronic hepatitis B in 2015 had the opportunity to have assessment, advice and consideration for treatment by an appropriately trained specialist.

HEPATITIS C

Hepatitis C is an infection of the liver caused by the hepatitis C virus (HCV). The virus is spread primarily through direct contact with the blood or bodily fluids of infected individuals. Intravenous drug use has become the main risk factor for HCV transmission. Primary exposure leads to an acute infection which is usually relatively mild with only 20-30% of infected individuals developing clinically evident acute hepatitis C. Chronic hepatitis C however is a progressive condition that accounts for at least one quarter of all cases of chronic liver disease. Chronic HCV infection has become a major health problem affecting an estimated 3% of the world's population (WHO 2015)

A significant proportion of chronic HCV infections are asymptomatic and progression of the disease can be slow, with cases remaining asymptomatic for one or two decades, but once established, chronic infection can progress to scarring of the liver (fibrosis), and advanced scarring (cirrhosis). In some cases, those with cirrhosis will go on to develop liver failure or other complications of cirrhosis, including Liver cancer.

More detailed information on the epidemiology of hepatitis C in the UK is published annually by Public Health England. Available at:

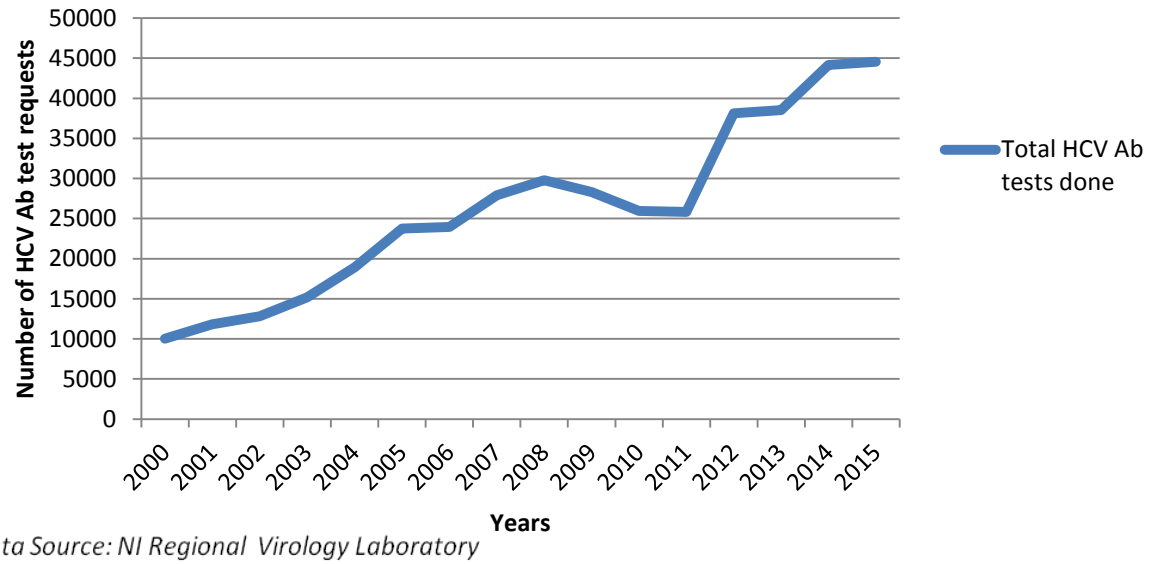
https://www.gov.uk/government/publications/hepatitis-c-in-the-uk

THE EPIDEMIOLOGY OF HEPATITIS C IN NORTHERN IRELAND 2000-2015

Northern Ireland is a very-low prevalence country for HCV with an average of 120 new HCV PCR positive cases being diagnosed every year.

HCV Testing

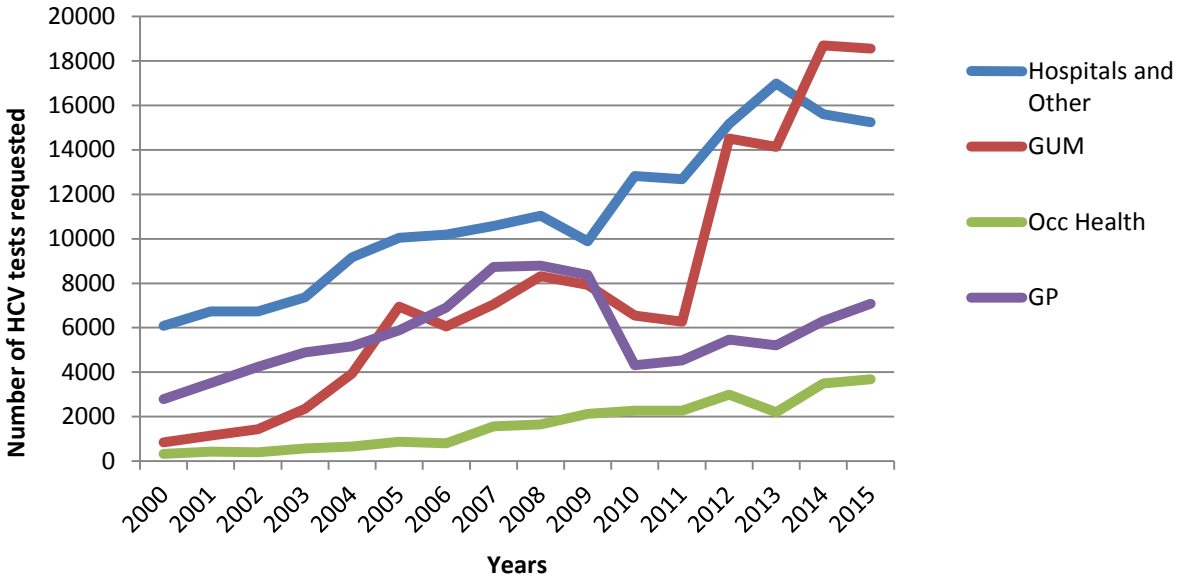
Figure 3: Number of HCV antibody tests requested in Northern Ireland, 2000- 2015



Data Source: NI Regional Virology Laboratory

Testing for HCV has quadrupled since 2000. In 2012 there was a marked increase in testing, which is partly attributable to an increase in testing in sexually transmitted infections (STI) clinics and a specific change in approach to "Opt-Out testing".

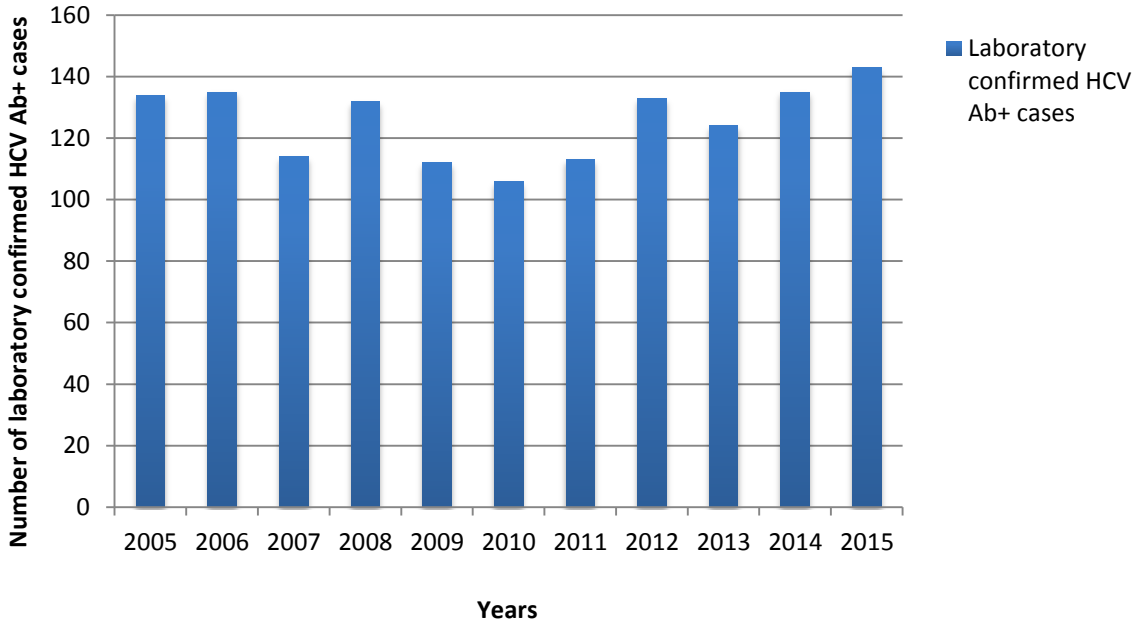
Figure 4: Source of HCV antibody tests requested in Northern Ireland, 2000- 2015



Data Source: NI Regional Virology Laboratory

Since 2012 there has been a 20 fold increase in testing at the 5 GUM clinics and a 10 fold increase in test requests from occupational health departments. The laboratory resource to do this has not been planned, commissioned or funded and represents a continuing challenge to the operation of the service.

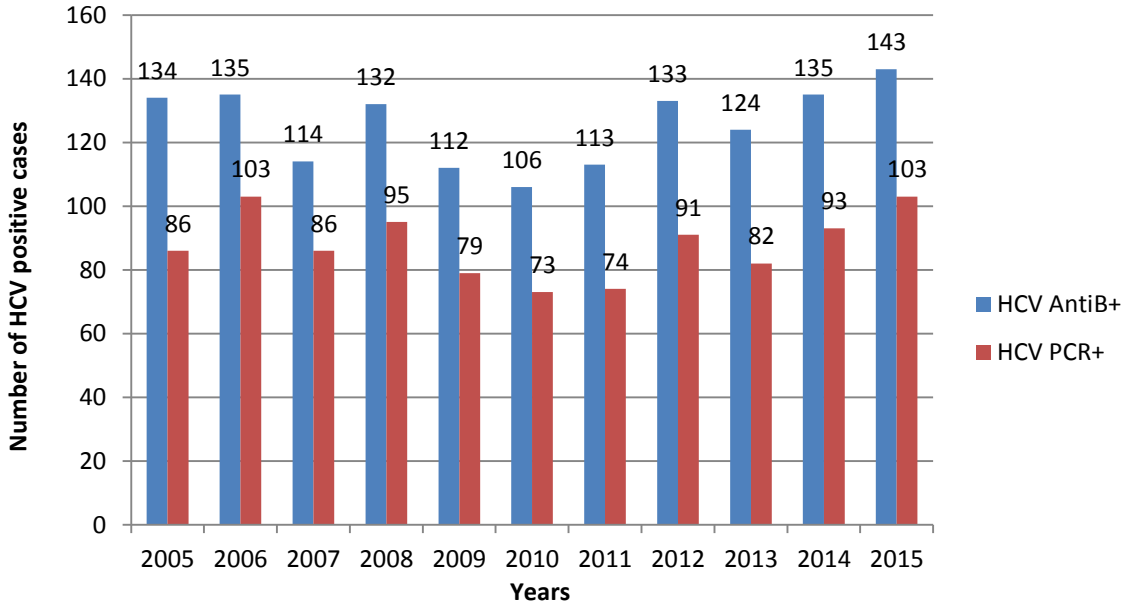
Figure 5: Laboratory-confirmed cases of hepatitis C in Northern Ireland, 2005 -2015



Data source:. Regional Virology Labs 2016

The number of new laboratory confirmed antibody positive reports of hepatitis C increased in 2015 to 145. 103 (73%) of the 143 new laboratory confirmed cases were HCV RNA positive (PCR positive) on initial sample testing. The cumulative total of laboratory confirmed cases of hepatitis C PCR positive in Northern Ireland from 1990 to 2015 is 2841.

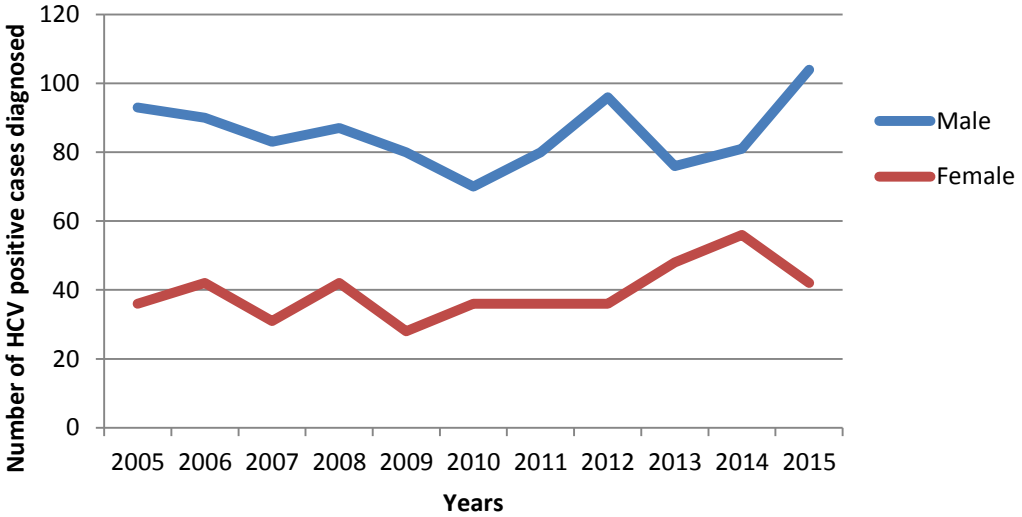
Figure 6: Number of laboratory confirmed cases of HCV PCR positive cases 2005 - 2015



Data source:. Regional Virology Laboratory/PHA 2016

All 105 HCV PCR positive cases diagnosed in 2015 will be followed up on and those referred to the Liver clinic in the Royal Victoria Hospital will be offered appointments for further testing and possible treatment.

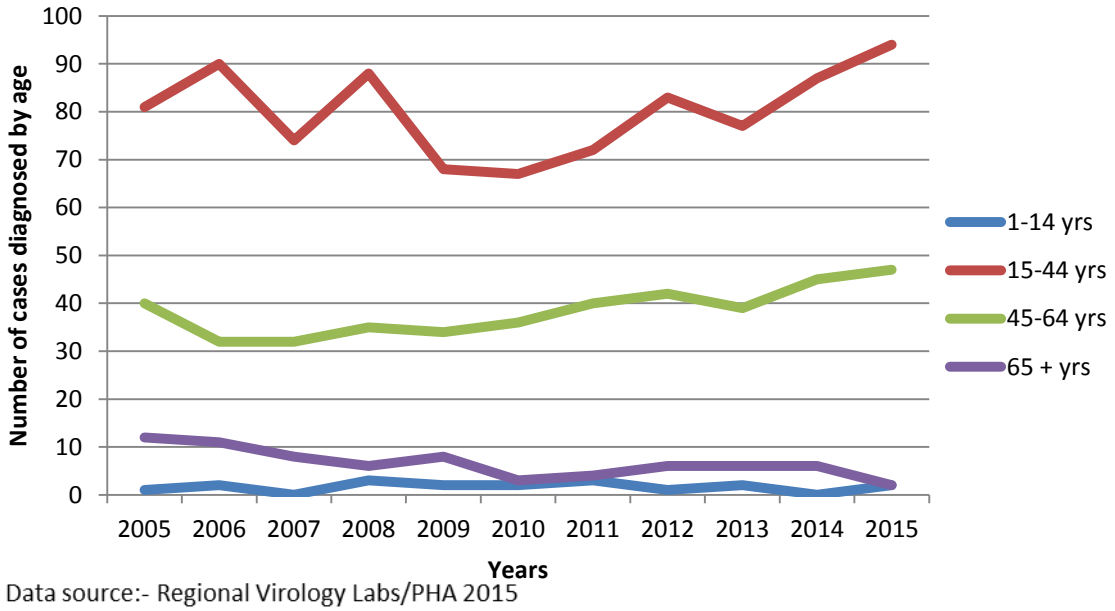
Figure 7: Gender of Laboratory confirmed cases of HCV antibody positive cases from 2005 - 2015



Data source:- Regional Virology Labs/PHA 2015

Information supplied by the Regional Virus Laboratory shows that there are approximately twice as many males are being infected with Hepatitis C than females. Of the 146 hepatitis C positive cases diagnosed, 104 (71%) were men and 42(29%) were women (figure 7).

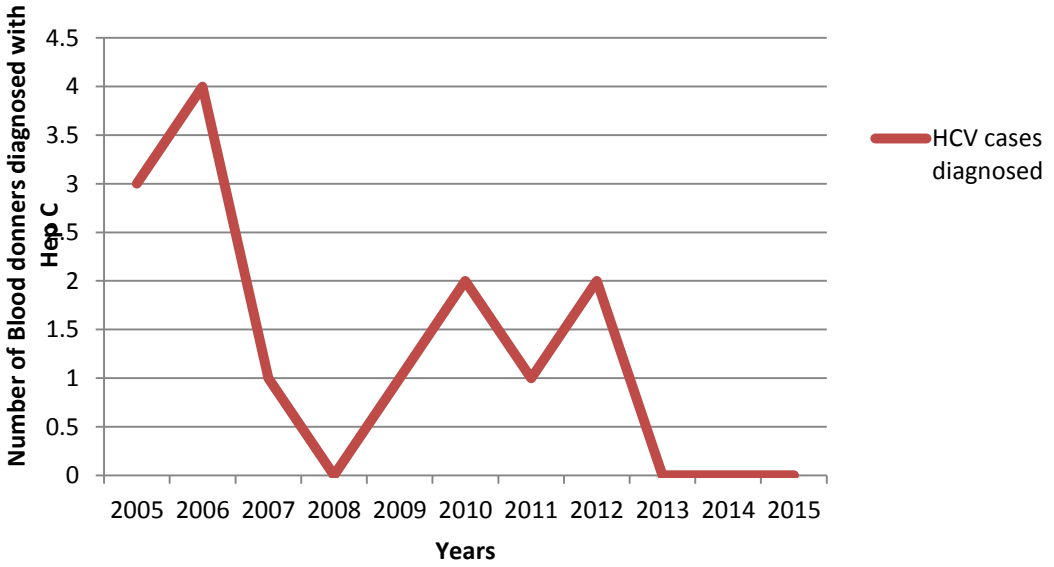
Figure 8: Laboratory-confirmed cases of hepatitis C in Northern Ireland, by age, 2005-2015



Data source:- Regional Virology Labs/PHA 2015

The majority of confirmed cases of hepatitis C occurred in persons aged from 15 to 44 years old.

Figure 9: Frequency of hepatitis C (HCV) in potential blood donors in Northern Ireland 2005 – 2015



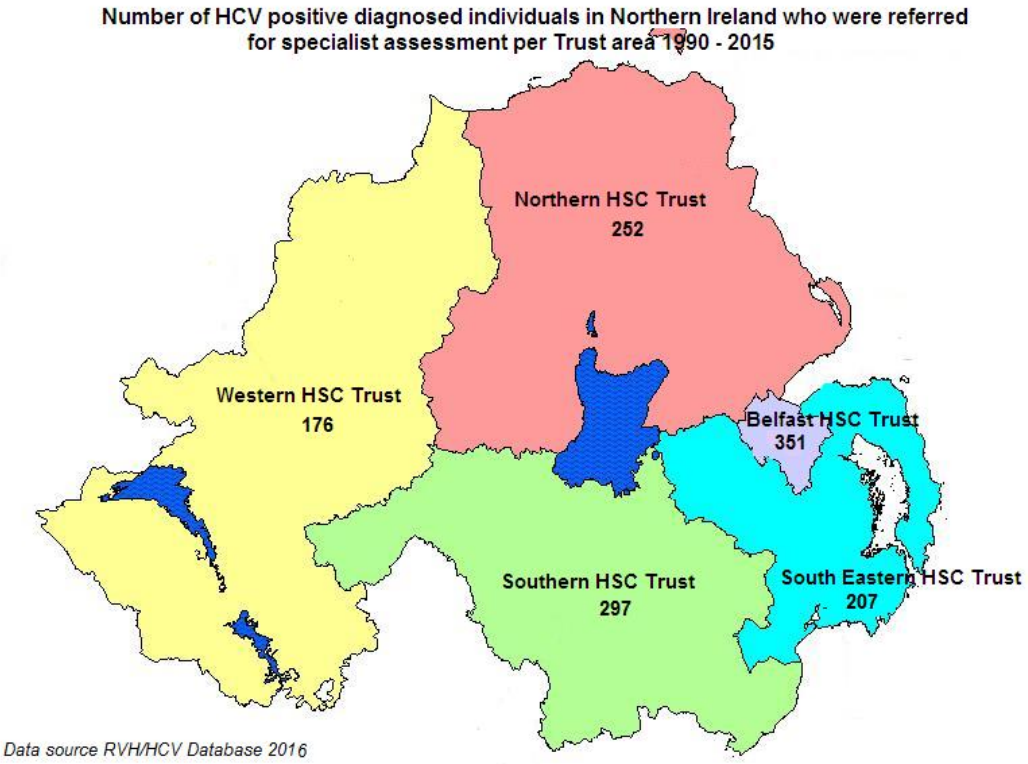
In Northern Ireland since 2013, HCV infection was not detected in donations from either new or repeat blood donors. While, HCV has not been detected in repeat donors since 2005, the rate of infection in new donors fluctuates between zero and five HCV positive donor detections per year. All donors are screened for blood borne virus including hepatitis C before being allowed to donate blood.

In Northern Ireland, 14 deaths from HCV-related ESLD or HCC were registered in 2014; the highest annual figure recorded over the last decade; the majority of deaths have occurred in men. Hospital

admissions of patients with HCV-related ESLD or HCC in Northern Ireland (counting each individual once per calendar year) have increased from 8 in 2006 to 23 in 2014*(HCV in the UK Report, 2015)*

Referrals for specialist assessment at the RVH Liver Clinic

Figure 10:



Figures from the Royal Victoria Hospitals Hepatitis C database for patients that present for specialist assessment and treatment shows that the highest number of patients being referred (351), come from Belfast Trust. The number being referred from the Southern Trust has risen significantly in the past few years(figure 10).

Records from the Regional Virus Laboratory, shows that there have been 2843 positive cases of Hepatitis C (HCV) diagnosed in Northern Ireland from 1990 – 2015. Of this total, there appears to only be 1297 or 46 % of HCV positive individuals in Northern Ireland that have been referred for specialist assessment and possible treatment over the 25 year period. It appears that, at least 54 % of individuals who have tested positive for Hepatitis C, for whatever reason, never presented for treatment. From September 2009 there is now a system in place that allows for the prospective follow up of all individuals who test HCV PCR positive. With the advent of very successful treatments, those who previously tested positive may wish to be referred for assessment and consideration for treatment.

MIND THE GAP:-NI HCV PCR POSITIVE FOLLOW UP PROGRAMME
543 HCV PCR positive cases were diagnosed from September 2009 to Dec 2015. 16 individuals died between diagnosis and attending the clinic for specialist assessment of their hepatitis C. Discounting those that had died, this made 527 individuals eligible for referral. 350 referrals have been received. The MCN have followed up on 177 cases where there did not appear to a record of a referral being received for specialist assessment. As a result of the follow up the Liver Clinic subsequently received 91 referrals after the first follow up letter was posted, 37 more referrals after the 2nd letter was posted. We also received feedback on all of the 44 cases who had not been referred for various reasons. There has been a significant reduction in the numbers not being referred from 30%, prior to the setting up of the MCN to 44/529 (8%). Of this 6/49 individuals are having their Hepatitis C status reviewed elsewhere in the province and 8 individuals are still been followed up on. The first follow up letters has been sent to the source of test

Figure 11: **- Reason for non- referrals to Liver Clinic. Sept 2009 –Dec 2015**

Reason for non-referral	Number
Lost to follow up	25
Moved out of Northern Ireland	5
Being reviewed elsewhere in Northern Ireland	6
Declined assessment and treatment	3
Not registered with a GP	1
Follow up letters sent and awaiting feedback/referral	8
TOTAL	49(100%)
Data Source: Regional Hepatology Unit, Belfast Hospital and Social Care Trust	

HCV Genotyping

Hepatitis C virus (HCV) genotyping is one of the most significant predictors of response to antiviral therapy. There are several genotypes of HCV but only genotypes 1 to 6 have been detected in NI with the vast majority of cases being genotype 1, 2 or 3. Up until the advent of newer all oral antiviral therapies, genotypes 2 and 3 had the best treatment response rates. Since the introduction of all oral antiviral therapies in 2015 we can expect some of the best results in those who have genotype 1.
It is for this reasons, testing for HCV genotype is clinically important. It is essential for people considering pharmaceutical treatment to know which genotype of the virus they are infected with, as this will determine the length of their treatment as well as the probabilities of success with treatment.
Figure 12: HCV Genotyping of 989 patients presenting for specialist assessment at RVH. 1990 - 2015

Genotype	Number of reports (%)
1	482(49)
2	61 (6)
3	409 (41)

4	32 (3)
5	2 (0.2)
6	3 (0.3)
Total	989 (100)
Source: NI Regional Virus Laboratory/ RVH HCV database	

In Northern Ireland of the 2841 laboratory confirmed positive cases of HCV (1990 -2015). Results from the local RVH Liver Clinic HCV database show that majority of individuals that have come forward for specialist assessment and possible treatment in the last 25 years are or were either genotype 1 or genotype 3 of the HCV virus (see figure 12).

Risk factors

Hepatitis C is asymptomatic for many years before patients start to feel unwell and present for treatment. Therefore many patients cannot recall how they were infected with HCV, making the risk factor or route of transmission information unreliable.

Figure 13: **Route of HCV transmission recorded by 1297 patients presenting for treatment from 1990 -2015**

Route (where recorded 1990-2015)	Number (%)
PWID	660
Blood/blood products	131
Sex	52
Needle stick injury	17
Tattoo	44
Overseas healthcare	55
Mother to baby and household	8
Other	6
Unknown	322
TOTAL	1297(100%)
Data Source: Regional Hepatology Unit, Belfast Hospital and Social Care Trust	

The above information (figure 13) is based on the information received from 975 of the 1297 patients that have or are presenting for specialist assessment at the Hepatology Clinic in the Royal Victoria Hospital Belfast. The rest of the patients did not disclose or could not recall their route of exposure. The largest proportion of HCV infection in Northern Ireland can be attributed to injecting drug use (figure 13).

Needle exchange services in Northern Ireland

In Northern Ireland, NSPs were available in 18 locations, including three outreach services *(see appendix 1).* The number of packs dispensed by needle exchange schemes has increased year-on-year since 2007/08, reaching 28,284 in 2013/14 . Specific packs are available for people who inject image and performance enhancing drugs and the number of packs issued for this use is rising. In 2013/14, of the 15,483 visits to the needle exchange scheme where the person disclosed what they would use the

needles for, 58% were for injecting image and performance enhancing drugs. In 2015, a pilot project was undertaken by PHA in conjunction with the Hepatitis B and C Clinical Network , based in

pharmacy needle exchange sites to survey individuals who use image and performance enhancing drugs to gain a greater insight into this group in Northern Ireland.
In Northern Ireland, 17% of currently injecting PWID reported direct sharing of needles and syringes in 2014; this level is lower than the 28% in 2004 (*HCV in the UK Report, 2015)*

Ethnicity

Prior to 2009, nationality was not generally recorded as part of the initial assessment at the RVH liver clinic. With the increase of requests for interpreting services, nationality is now recorded more routinely.

Figure 15: Nationality of those patients with Hepatitis C (HCV) presenting for specialist assessment at the RVH Liver clinic: 1990 -2014

Nationality (where recorded 1990-2014)	Number	(%)
EU National	1245	*96*
Non – EU National	52	*4*
Total	1297	*100*
Data Source: Regional Hepatology Unit, Belfast Hospital and Social Care Trust		

Based on the information currently available from the RVH hepatitis C database, the vast majority (96%) of patients were EU nationals with 16% of these originating from Eastern Europe. and 4% originated from non- European countries.

Treatment for HCV

All treatment for HCV in Northern Ireland is carried out by the RVH Liver Unit and since 2004 the Province has adopted all NICE guidelines on HCV treatment. In March 2015 we commenced an early access program to offer the new all oral antiviral therapies to patients with cirrhosis secondary to HCV genotype 1. Then in Autumn 2015, funding and approval were given to introduce all NICE approved treatments for genotypes 1 to 6. A significant backlog of patients waiting for the new all oral antiviral therapies had built up since 2004, including those who had failed to clear with previous treatments, those who were intolerant of interferon based therapy, those in whom interferon was contraindicated and those who chose to wait through personal preference. In October 2015 there was a backlog of over 130 patients. Since November 2015, we have started 2 new patients per week on treatment. Patients are prioritised for treatment based on 2 factors – clinical priority (presence of cirrhosis or need for liver transplantation) and length of time waiting for the new treatments (with those waiting longest being treated first). The waiting list for HCV treatment is dynamic with approximately 45-50 new patients being added to the list each year over the past decade. Taking this into account, it is anticipated that the backlog of patients waiting for treatment will have been dealt with by Spring 2017.

REVIEW OF PROGRESS ON THE ACTION PLAN FOR THE PREVENTION, MANAGEMENT AND CONTROL OF HEPATITIS C IN NORTHERN IRELAND. 2007.

In 2007 the DHSSPS published their action plan for the prevention, management and control of Hepatitis C in Northern Ireland. The Hepatitis C Managed Clinical Network was established as part of the Action Plan and the network has taken forward many areas in the plan, in collaboration with other agencies. In 2011 the work of the network was expanded to include hepatitis B due to its shared risk factors.

PROGRESS TO DATE ON THE 2007 PLAN'S ACTIONS

Action	Brief summary of action	Progress
1	Develop public information materials on hepatitis C	Completed
2	Leaflet and training for healthcare professionals on hepatitis C	Completed and training ongoing
3	Information for clinicians to be sent by Virus Lab with all positive tests	Completed and ongoing
4	Raise awareness of hepatitis C in PWID, training for people who work with PWID and expansion of needle exchange programme	Completed and ongoing
5	DHSSPS guidance on healthcare workers infected with BBV's	Completed
6	All trusts to have policies on management of blood exposure incidents	Completed
7	District councils to submit bye-laws for regulation of cosmetic piercing and tattooing businesses	Completed and ongoing work
8	NI prison service to consider policy on prevention, control and treatment of BBV's	Ongoing
9	Trusts to take account of NICE guidance on hepatitis C treatment	Completed and ongoing
10	Second specialist hepatitis nurse to be appointed to regional hepatology unit	Completed
11	Health Boards and Trusts to set up Hepatitis C managed clinical network	Completed
12	Hepatitis C MCN to review and strengthen surveillance arrangements	Completed and ongoing
13	HSS Boards to designate a BBV co-ordinator	Each trust has a clinician point of contact
14	DHSSPS to monitor progress of the implementation of the action plan	Network annual reports

LOOKING AHEAD TO 2020 AND BEYOND

Due to the huge global burden of disease caused by hepatitis B and C worldwide, the WHO published for the first time in November 2015 a Global Health Sector Strategy on Viral Hepatitis 2016—2021 with an overall aim to working towards global elimination of viral hepatitis. The strategy looks at prevention, testing, links to care, treatment and chronic care.

Although aspirational in nature, the Northern Ireland Hepatitis B and C Network shares its overall goals that new infections should be prevented, all people at potential risk of infection should be tested and those found to be positive should be referred for assessment for treatment and care.

Table 1. Global hepatitis strategy targets at a glance

TARGET AREA	BASELINE 2015	2020 TARGETS	2030 TARGETS
Impact targets			
Incidence: New cases of chronic viral hepatitis B and C infections	Between 6 and 10 million infections are reduced to 0.9 million infections by 2030 (95% decline in hepatitis B virus infections, 80% decline in hepatitis C virus infections)	30% reduction (equivalent to 1% prevalence of HBsAg[1] among children)	90% reduction (equivalent to 0.1% prevalence of HBsAg among children)
Mortality: Viral hepatitis B and C deaths	1.4 million deaths reduced to less than 500 000 by 2030 (65% for both viral hepatitis B and C)	10% reduction	65% reduction
Service coverage targets			
Hepatitis B virus vaccination: childhood vaccine coverage (third dose coverage)	82%[2] in infants	90%	90%
Prevention of hepatitis B virus mother-to-child transmission: hepatitis B virus birth-dose vaccination coverage or other approach to prevent mother-to-child transmission	38%	50%	90%
Blood safety	39 countries do not routinely test all blood donations for transfusion-transmissible infections 89% of donations screened in a quality-assured manner[3]	All countries have haemovigilance systems in place to identify and quantify viral hepatitis transfusion transmission rates	Reduce rates of transmission by 99% compared with 2020.
Safe injections: percentage of injections administered with safety-engineered devices in and out of health facilities	5%	50%	90%
Harm reduction: number of sterile needles and syringes provided per person who injects drugs per year	20	200	300
Viral hepatitis B and C diagnosis	<5% of chronic hepatitis infections diagnosed	50%	90%
Viral hepatitis B and C treatment	<1% receiving treatment	5 million people receiving hepatitis B virus treatment 3 million people received hepatitis C virus treatment	80% of eligible persons with chronic hepatitis B virus infection treated 80% of eligible persons with chronic hepatitis C virus infection treated

Available at:.
http://www.who.int/hepatitis/strategy20162021/Draft_global_health_sector_strategy_viral_hepatitis_13nov.pdf?ua=1 (Last accessed Aug 2016)

http://apps.who.int/iris/bitstream/10665/130012/1/WHO_HSE_PED_HIP_GHP_2012.1_eng.pdf?ua=1&ua=1

SURVEILLANCE

Hepatitis B and C Virus Surveillance Work stream 2015 -2018

Lead: Dr Ian Cadden - Consultant Hepatologist, Belfast Trust

Aim: To ensure that robust systems are agreed and established to support surveillance of HBV and HCV infection in Northern Ireland (NI).

NB: Hepatitis B is a notifiable disease and so notifications of all acute and chronic hepatitis B, including antenatal cases are reported to the Public Health Agency. Public Health actions are carried out for the cases and their close contacts and surveillance data is collected and collated appropriately. The PHA and the hepatitis B and C managed clinical network work closely together to use all data collected to enhance knowledge of these diseases in Northern Ireland and improve patient care.

Objectives

1. To utilize the HCV register to track the progress of all newly diagnosed cases of HCV infection in NI and to improve follow-up of HCV cases not referred for treatment or those lost to follow-up;

2. To agree how information derived from the database will be used to address the gap between total number of confirmed HCV cases and number of cases referred for work-up/assessment for treatment.

3. To work with PHA to use surveillance data for HBV and information from the liver unit HBV database to enhance information available on HBV infected patients in Northern Ireland

4. To agree how information derived from HBV database can be cross referred with outputs from RVH and PHA relating to acute/chronic HBV cases, in an attempt to address the gap between total numbers of confirmed acute/chronic HBV cases referred for work up/ treatment by liver unit RVH.

Key Progress 2015-16

- Ongoing identification of HCV positive individuals diagnosed since Sept 2009 but not yet referred for assessment for anti-viral therapy by cross-referencing positive HCV results with referrals received and then following up on these individuals.

- Ongoing audit of those identified as chronic hepatitis B to ensure referral to RVH for assessment.

DRUGS & ADDICTION SERVICES

Lead: Trudi Coyne - Team Leader Substitute Prescribing Team and Prescribed Medication Team Belfast Trust.

Hepatitis B and C Drugs & Addiction Services Work plan 2015 -2018

Aim: To reduce the transmission of HBV and HCV infection among injecting drug users by promoting routine and low threshold testing for HBV and HCV infection among injecting drug users and exploring best practice models for engaging and retaining injecting drug users in HBV and HCV treatment.

Objectives:

1. To identify potential areas of development that will assist in reducing HBV and HCV transmission among injecting drug users in NI;
2. To identify potential barriers for those injecting drug users with hepatitis B and /or C who are not engaging in treatment;
3. Continue to promote the use of harm reduction services throughout NI including the Prison service to assist in reducing the transmission of blood borne pathogens.
4. To encourage injecting drug users to be vaccinated against Hepatitis B (HBV)
5. Co-ordinate an audit of Hep B vaccination rates in addiction treatment services in NI.

Key Progress 2015-16:

- NI wide hepatitis B vaccine PGD produced and information to encourage vaccine uptake in risk groups.
- Foil (to enable heroin fumes to be inhaled, rather than injecting heroin) has been made available to all needle exchanges in Northern Ireland.
- A third needle exchange outreach service established, working particularly with homeless people in Belfast, bringing the total number of needle exchanges to 17 (14 fixed sites, and 3 outreach services)

DIAGNOSTIC & TREATMENT SERVICES

Lead: Dr Neil McDougall, Consultant Gastroenterologist and Hepatologist, Belfast Trust

Hepatitis B and C Diagnostic and Treatment Services Work plan 2015 -2018

Aim: To promote timely diagnosis of HBV and HCV infection in NI (particularly in high risk groups) and to facilitate equitable access to high quality treatment of diagnosed HBV and HCV infections through the regional hepatology unit in RVH.

Objectives:

1. To agree and disseminate a comprehensive care pathway for the management of individuals diagnosed with HBV and HCV infection in NI, which includes pre-treatment assessment and work-up in a peripheral acute center (if appropriate) followed by referral to the regional hepatology

unit where all HBV and HCV treatments will be undertaken;

2. To deliver all treatment of HBV and HCV infection in NI through the regional hepatology unit, using treatment guidelines based on NICE recommendations;

3. To liaise with NI Prison Service and with the drugs/addiction work-stream of the Hepatitis B and C MCN, in order to improve uptake of testing and assessment/treatment of HBV and HCV positive cases identified within this high risk population;

4. To work closely with Maternity Services to improve the referral pathways, assessment and management of patients diagnosed with chronic HBV during pregnancy (including annual audit of NI data)

Key progress

- Early access program in Spring 2015 to allow use of all oral antiviral treatments in those with advanced HCV genotype 1 disease.
- Successful introduction of new Direct Acting Antivirals (DAAs) in Autumn 2015 and adoption of all NICE guidelines on HCV treatment
- Audit of early access program demonstrating over 90% success in clearance of HCV infection in cirrhotic patients
- Introduction of a prison based 'one stop shop' clinic for assessment of patients with chronic HCV in Autumn 2016

EDUCATION AND AWARENESS

Lead: Dr Lucy Jessop PHA Consultant in Health Protection and Chair of Network

Hepatitis B and C Education and Awareness Work plan 2015 -2018

Aim: To prevent people becoming infected with hepatitis B and C through education and increased awareness, and to encourage early detection of those who have become infected.

Objectives:

1. To continue to produce and update education/training resources for use in NI and to address any gaps in the material available as required;

2. To agree appropriate models for delivery of education and training to specific populations/groups in NI;

3. To implement agreed education and training programs for specific populations/groups, including the general population via the media on World Hepatitis day annually;

4. Horizon scanning for further groups potentially at risk of hepatitis B and C e.g. people who inject image and performance enhancing drugs, and working with appropriate groups to develop education and information tailored to these groups.

Key progress 2015-16

- Educational updates for prisons have started in 2016 for healthcare and other staff and prisoners.
- Easy to read leaflet for those with low literacy levels on hepatitis B and C produced for use in addictions services, prisons and GUM settings.
- Educational awareness sessions for hostel staff
- The Hepatitis B and C network holds regular educational events for professionals, in 2016 this concentrated on the management of those who choose to inject drugs and share injecting equipment and put themselves at risk of contracting hepatitis B and C. Event was called – 'If the Drugs don't kill you the needle might'. Approximately 120 people attended and feedback on the event was very positive.

Hepatitis B & C Managed Clinical Network Website

The Network website www.hepbandcni.net was redesigned in 2015. It supports the various work streams of the Network and provides a point of contact for information on all aspects of the service. On the website public, patients and healthcare professionals will find Hepatitis B&C information pertinent to Northern Ireland, along with contact details for the hepatitis specialist nurses.
The website aims to provide up to date information and also translated material on hepatitis B and C. Links have also been provided to other sites that offer information, support and guidance.
For health professionals there are links to guidelines and e-learning site and also access to the Power point presentations that were presented by at the Annual Update event which was held in February 2016.
Each work stream has its own page on the website, which is hyperlinked to other sites to make it more interactive.

The website is being updated and more information is added or removed, on a monthly basis, in an attempt to keep all the information current.

A linked email address - **info@hepbandcni.net** now allows for the public / professional to request more information or to ask questions. These emails are sent to the Regional Hepatitis C Clinical Network Manager who then forwards these questions to the appropriate team member to be answered.

ABBREVIATIONS

CCDC	Consultant in Communicable Disease Control	MCN	Managed Clinical Network
DHSSPS	Department of Health, Social Services and Public Safety	NI	Northern Ireland
DOB	Date of Birth	NICE	National Institute Clinical Excellence

HBV	Hepatitis B Virus	PHA	Public Health Agency
HCV	Hepatitis C Virus	PCR	Polymerase Chain Reaction
HCV AB	Hepatitis C Virus Antibody	RVH	Royal Victoria Hospital
GUM	Genitourinary Medicine		

APPENDIX 1: MEMBERSHIP OF THE STEERING GROUP 2016

Dr	Lucy Jessop	CCDC, PHA	Chairperson of NI Hepatitis B&C MCN
Dr	Neil McDougall	Consultant Hepatologist, Belfast Trust(Clinical Lead)	Clinical lead for the NI Hepatitis B&C MCN
Dr	Ian Cadden	Consultant Hepatologist,	Belfast Trust
Dr	Stephen Bailie	GP Unit	Health Board
Mrs.	Trudi Coyne	Team Leader Substitute Prescribing Team and Prescribed Medication Team	Belfast trust
Ms	Helen Creighton	Pharmacist	Health and Social Care Board
Mrs.	Alison Griffiths	Health Protection Nurse	Public Health Agency
Dr	Conall McCaughey	Consultant Virologist,	Belfast Trust
Ms	Seana Murray	Admin Support NI Hepatitis C Clinical Network	Belfast Trust
Mrs.	Annelies McCurley	Regional NI Hepatitis C MCN Manager	Belfast Trust
Mrs.	Orla McCormick	Hepatitis Specialist Nurse,	Belfast Trust
Mrs	Karen Patterson	Hepatitis Specialist Nurse,	Belfast Trust
Dr	Say Quah	GUM consultant	Belfast Trust
Mrs	Roberta Carlisle	Antenatal screening coordinator	Belfast Trust /Public Health Agency
Mrs	Victoria Creasy	Health and Social Wellbeing Improvement Senior Officer	Public Health Agency
Mrs	Tracey Heasley	Clinical Lead for SET Prison Nursing staff,	SE Trust
Ms	Gemma Wasson	Hepatology Pharmacist	Belfast trust

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