Dry Blood Spot Testing

Public Health England has confirmed that new diagnoses of Hepatitis C infection (HCV) have risen by more than one third since 2010 to 10873 cases in 2012\(^1\). Statistical modelling predicts that 15,840 individuals will be living with HCV-related cirrhosis or Hepatocellular Carcinoma (HCC) in England in 2020 if left untreated\(^2\). Early detection of HCV and appropriate treatment can cure or stabilise up to 80 per cent of patients\(^3\).

NICE guidance

NICE public health guidance 43 - *Hepatitis B and C – ways to promote and offer testing* - (guidance.nice.org.uk/ph43) recognises the importance of the development of fully integrated care pathways in primary and secondary care for the screening and treatment of at risk individuals.

NICE recommends that commissioners should consider all venues where testing and treatment services are, or could be, offered that can also ensure continuity of care and onward referral to specialist treatment for people who test positive. Community pharmacies are specifically identified as having the potential to provide such an opportunity in this document.

Why is it important?

Both Hepatitis B (HBV) and Hepatitis C are viral infections of the liver. Chronic infection with the former can result in hepatic necrosis which is often fatal; the latter left untreated is a major cause of acute hepatitis and chronic liver disease, including cirrhosis and liver cancer\(^4\). Early detection of infection and swift onward referral can result in significant cost savings as the cost of treating advanced symptoms can be avoided. Research by RAND\(^5\) found that failure to act on hepatitis C alone could lead to an increase in prevalence from 0.44% in 2010 to 0.61% in 2035 with a corresponding increase in costs. It was calculated that healthcare costs associated with HCV would increase from £82.7m in 2012 to £115m in 2035 with

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\(^1\) Public Health England News release 25\(^{th}\) July 2013

\(^2\) Hepatitis C in the UK 2012, Health Protection Agency

\(^3\) Hepatitis C Trust, 2005

\(^4\) World Health Organisation, 2005

\(^5\) Hepatitis C: A projection of the healthcare and economic burden in the UK, January 2013
productivity losses increasing from £184-367m in 2010 to £210-427m in 2035.

**What can Community Pharmacy do?**

Using dry blood spot testing, community pharmacies can provide an easily accessible location for blood borne virus (BBV) screening over an extended time period, including the traditional out of hours periods. The groups of clients considered to be at high risk of infection with BBV, as identified in The Green Book\(^6\), regularly access services provided by community pharmacies, such as needle and syringe programmes and supervised consumption. This provides the ideal opportunity for provision of healthcare advice and screening and with over 90% of pharmacies having a private consultation room, community pharmacies are well placed to deliver BBV screening services.

**Commissioning a Local Service Solution**

The first step is to talk to your Local Pharmaceutical Committee (LPC).

A community pharmacy BBV screening service is simple and cost-effective. Test processing costs for HBV and HCV are currently (Jan 2014) around £30/test including the cost of the test but excluding a fee for the provision of the service in the pharmacy. Five dry blood spot samples are taken allowing screening for HIV and syphilis in addition to HBV and HCV. Rapid, direct onward referral can be arranged for clients screening positive to any tests.

**Headline Outcome Data**

In 2010, pharmacies in one area working in conjunction with the local drug treatment centre offered BBV screening to clients identified with qualifying risk factors. The headline outcomes for just one quarter were\(^7\):

- 10 participating pharmacies carried out 133 BBV screens
  - 2 Hepatitis B positive and 15 Hepatitis C positive
- 10 Active infection – PCR positive - Genotyping carried out from sample identified 3 Genotype 1, 1 Genotype 2 and 6 Genotype 3
- 2 asymptomatic HIV positive identified

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\(^6\) Chapter 18, Immunisation against infectious disease, Public Health England

\(^7\) Community Pharmacy HBV/HCV Testing and HBV Vaccination Service, Isle of Wight 2009