



# Communicable disease control

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The Health Protection Agency was created in April 2003, to support local health communities in protecting the health of their populations against infections and environmental hazards. The North West London Health Protection Unit, part of the Health Protection Agency, covers the Harrow area.

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## 5.1 Surveillance of infectious diseases

Some infectious diseases, for example food poisoning, meningitis and measles, are notifiable, which means that by law they must be reported to the local authority environmental health department. Most notifications are made by GPs, chest clinics, microbiology departments and hospital consultants. The Health Protection Unit collates and analyses these notifications, to monitor the incidence of infectious diseases and get early evidence of possible outbreaks. Unfortunately notification is less than complete. For some particularly important diseases, for example tuberculosis and diseases caused by the meningococcus bacteria (meningitis and septicaemia), the Health Protection Unit analyses more detailed information collected through national enhanced surveillance programmes.

HIV disease is not notifiable, but anonymous data have been collected since 1993 by the Survey of Prevalence HIV Diagnoses (SOPHID), which is managed by the Public Health Laboratory Service.

Table 5.1 shows some of the data on infectious disease notification in Harrow. Tuberculosis is a serious problem in Harrow, with a very high notification rate. Notifications of meningococcal disease, mumps, malaria, viral hepatitis and food poisoning in Harrow are all lower than the national average. While the numbers of people with dysentery have increased and are slightly higher than the national average, the total number of people affected is low.

**Table 5.1** Infectious disease notifications, rates/100,000 population Harrow (2002), England & Wales (2001)

|                                      | <i>Harrow 2002</i> | <i>England &amp; Wales 2001 §</i> |
|--------------------------------------|--------------------|-----------------------------------|
| Dysentery                            | 4.2                | 3                                 |
| Food poisoning                       | 78.2               | 161                               |
| Malaria                              | 1.4                | 2                                 |
| Meningococcal septicaemia/meningitis | 0.9                | 5                                 |
| Measles                              | 1.9                | 5                                 |
| Mumps                                | 2.8                | 5                                 |
| Tuberculosis                         | 60.8               | 13                                |
| Viral hepatitis                      | 2.3                | 6                                 |

Source Brent and Harrow Communicable disease database  
 § Communicable Disease Surveillance Centre, Colindale

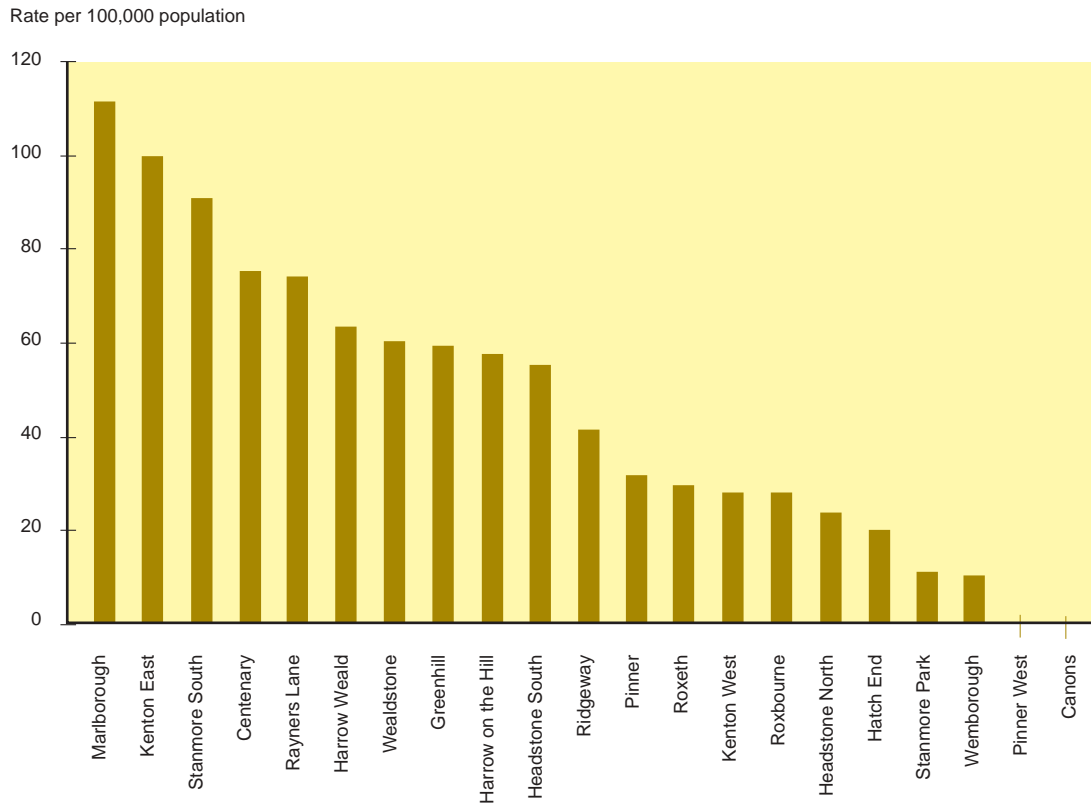
## 5.11 Tuberculosis

In Harrow, the notification rate for tuberculosis is more than four times the national average, and at least 50 per cent higher than the London average. In 2002, 130 Harrow residents were notified with tuberculosis, a 29 per cent increase on 2001. This represents a rate of 61 per 100,000 population; the 2001 rate for England and Wales was 13 per 100,000 and for London, it was 39 per 100,000. Nationally, about 65 per cent of tuberculosis notifications are of disease affecting the lungs (the most infectious type) rather than other sites, such as lymph nodes, bones, brain linings (meninges) or intestines. In Harrow, in 2002, there was a lower proportion (45 %) with lung tuberculosis compared with previous years and a higher proportion with tuberculosis affecting the lymph nodes in the chest (mediastinal node disease).

Nationally, tuberculosis incidence shows a strong association with socio-economic deprivation – poorer people are more likely to get the disease. Figure 5.1 shows the number of notifications in each of the Harrow electoral wards. In 2001, the highest number of notifications came from people living in Marlborough, Kenton East and Stanmore South.

A North West London committee has been set up to work towards the targets set by the London Regional Office in 2000. It meets regularly every two months to discuss progress towards these targets and specific guidelines on treatment and services. For example, the group has worked on a shared definition of indicators such as rates of treatment completion, and standards for managing people working in the health service discovered to have tuberculosis, including tracing of and preventive treatment to contacts.

**Figure 5.1** TB notifications by ward in Harrow, 2001



Source Communicable Disease Surveillance Centre (2000)

**TB targets and progress towards them**

- Rates of monitoring of treatment completion of at least 90 per cent as from April 2001.  
*The Health Protection Unit has been recording information on completion of treatment since 1999. In 2001, it has so far received information for 93 per cent of Harrow notifications; outstanding reports are still being chased up.*
- TB nurses across each sector to increase from one nurse per 50 notifications to one nurse per 40 notifications by April 2002.  
*Currently there are six full time nurses covering both Brent and Harrow but we have applied for more funding to increase staffing.*
- By April 2002 all patients presenting with/being treated for TB will be offered and recommended an HIV test.  
*All adults presenting with/being treated for TB at Northwick Park Hospital are offered an HIV test.*
- All clinics should have full connectivity to NHSNet in order to link with the London TB register.  
*Both Northwick Park and Willesden chest clinics are connected to the NHSNet and use the electronic London TB register to enter new patients. The Health Protection Unit has access to the register for monitoring and surveillance.*

## 5.12 Measles, mumps and rubella

Measles, mumps and rubella (MMR) are serious viral diseases that have, throughout history, caused substantial disability and millions of deaths. In Harrow in 2002, there were four notified cases of measles, potentially the most lethal of these three diseases, and three in 2001. Fortunately, on further investigation by salivary testing none were found to be positive for measles. There were no notifications of rubella in 2001 and only one in 2002. There are about six notifications each year of mumps in Harrow.

In Harrow, in the period October to December 2001, 84 per cent of eligible children were immunised against MMR. This is much lower than the level needed to prevent outbreaks (95 %). As a result, Harrow is likely to experience measles outbreaks and an increase in births of babies with congenital rubella (born blind, deaf, or other serious congenital abnormality). Unvaccinated children currently benefit from the vaccination programme in the UK, which, because most children are vaccinated, makes contact with the viruses unusual. This situation may change if uptake does not increase. Unvaccinated children are also at very high risk when travelling abroad, where vaccination rates may be much lower and risk of exposure much higher.

**Table 5.2** Immunisation coverage for childhood vaccination in Brent and Harrow 2001–02

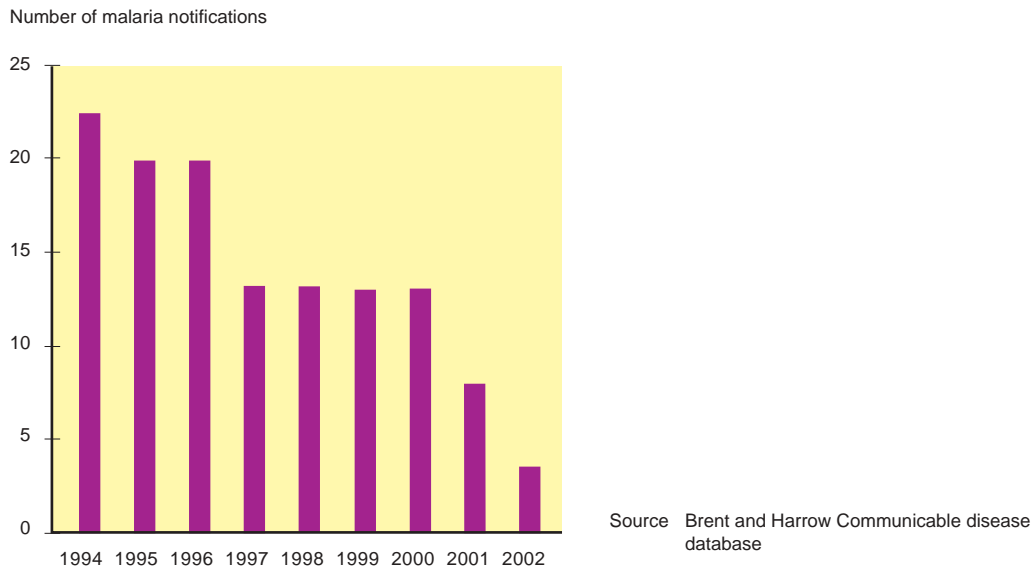
|                | <i>Number of children</i> | <i>Diphtheria %</i> | <i>Tetanus %</i> | <i>Polio %</i> | <i>Pertussis %</i> | <i>Haemophilus Influenzae type B %</i> | <i>Meningitis C %</i> |
|----------------|---------------------------|---------------------|------------------|----------------|--------------------|--|-----------------------|
| England        | 572,888                   | 94                  | 94               | 94             | 93                 | 93                                     | 85                    |
| London         | 94,204                    | 89                  | 89               | 88             | 88                 | 88                                     | 70                    |
| Brent & Harrow | 6,330                     | 88                  | 89               | 88             | 88                 | 88                                     | 77                    |

Source Cover Of Vaccination Evaluated Rapidly (COVER) data

Websites for further information/guidance: [www.mmrthefacts.nhs.uk](http://www.mmrthefacts.nhs.uk)  
[www.phls.co.uk/topicsaz/vaccination/mmr.htm](http://www.phls.co.uk/topicsaz/vaccination/mmr.htm)

## 5.13 Malaria

Malaria can be a very dangerous infection, nearly always acquired abroad following a bite from an infective mosquito. Over the last few years, the number of cases of malaria in people living in Harrow has decreased (Figure 5.2).

**Figure 5.2** Notifications of malaria in Harrow

## 5.14 Other infections

Evidence from laboratory reports shows that meningococcal disease is under-reported by the formal notification route.

The Cover of Vaccination Evaluated Rapidly (COVER) programme, co-ordinated by Communicable Disease Surveillance Centre, monitors immunisation coverage data for children in the UK.

Table 5.2 shows the percentage of children immunised by their second birthday in 2001/02. For all, immunisation rates are lower than average for England. The rates in Brent and Harrow are roughly similar to the average rates for London.

## 5.15 Food poisoning

Food poisoning was the most frequently notified disease in Harrow in 2002. Substantial undernotification is likely, as most people with mild food poisoning do not seek medical help.

Campylobacter and salmonella enteritidis were the most common causes in the notified cases. Campylobacter is a bacteria carried in the guts of animals, which may contaminate meat products, especially poultry. Salmonella is a bacteria found in raw meat, eggs and unpasteurised dairy products, and is sometimes transmitted by pets.

## 5.16 Viral hepatitis

Viral hepatitis is an infection affecting the liver, and may be due to any one of a number of different viruses. Hepatitis A tends to be transmitted between people by the faecal-oral route. Hepatitis B and C are particularly important because they may cause chronic health problems and because people can become long-term carriers and can transmit the virus to others. The viruses are most commonly transmitted sexually, by intravenous drug use, or from mother to child during birth (vertical transmission). People with hepatitis B who test positive for a particular part of the virus (hepatitis B e antigen) are most infectious.

In 2001, there were five new cases of hepatitis notified in Harrow residents, all hepatitis B. While there were no notified cases of hepatitis C in Harrow during 2001 and 2002, there may be substantial under-notification because the symptoms are often less obvious.

The Department of Health recommends that pregnant women are screened for hepatitis B. About sixty infants are born to hepatitis B positive mothers in Brent and Harrow each year. The risk of vertical transmission from infected mother to baby is between 85 and 90 per cent for infants born to women who test positive for both hepatitis B surface antigen and hepatitis B e antigen. Neonatal vaccination reduces the risk of a child becoming a chronic hepatitis B carrier by 90 per cent.

In 1998, an audit of immunisation in babies at risk from hepatitis B found that only 55 per cent of children in Brent and Harrow received the whole course of vaccination. A new protocol was developed in 1999 to ensure that children received all four doses. All local pregnant women are now offered screening for hepatitis B. All women found to be positive are counselled and their babies followed up by the Health Protection Unit in collaboration with infection control nurses, practice staff and health visitors. So far the protocol appears to have led to high coverage rates (see Table 5.3).

Serology results are currently being checked to evaluate whether the vaccination programme has prevented vertical transmission. Early results suggest that none of the children followed up were infected.

**Table 5.3** Brent & Harrow vaccination coverage for hepatitis B in infants at risk, percentages

| Coverage | 2001 | 2000 | 1999 | 1998 |
|----------|------|------|------|------|
| Dose 1   | 100  | 100  | 100  | 95   |
| Dose 2   | 100  | 100  | 100  | 58   |
| Dose 3   | 100  | 100  | 100  | 55   |
| Dose 4   | 97   | 98   | 95   | ⌘    |

Notes ⌘ previously 3 dose schedule  
Source Hepatitis B infants at risk database

## 5.17 Influenza

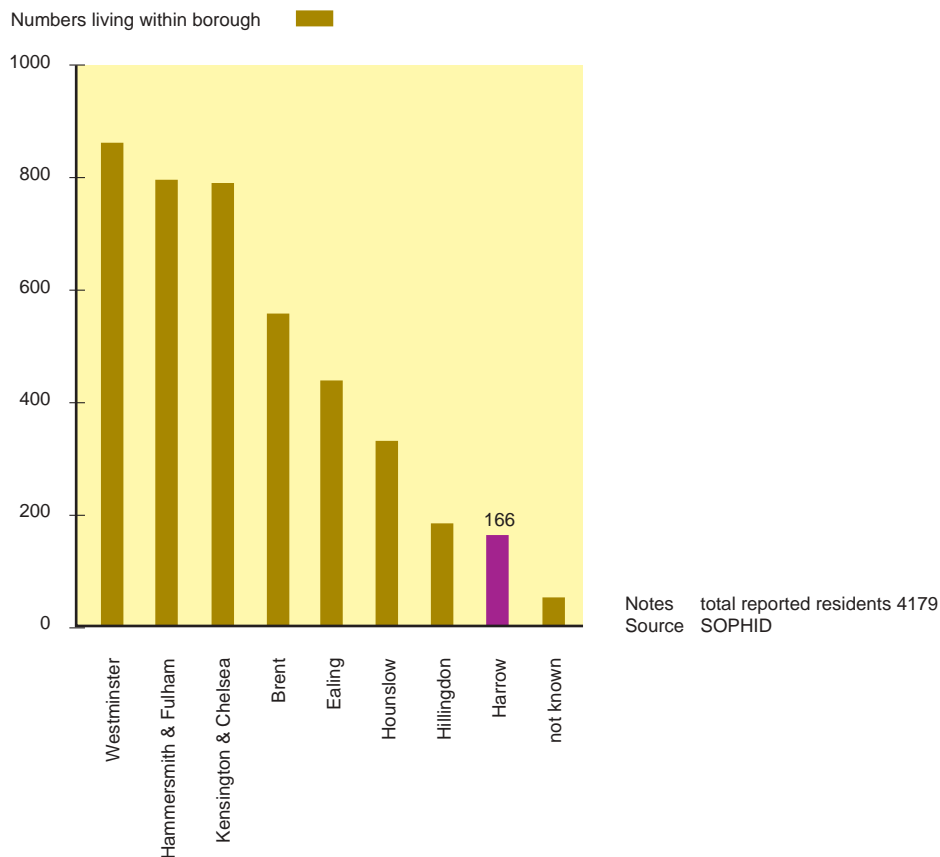
Influenza is most common in the months of December and January. The Department of Health recommends influenza vaccination for all people aged 65 and over and a number of other risk groups, including people in long stay accommodation and with underlying medical conditions, such as asthma and heart disease. The vaccine needs to be repeated every year. The Health Protection Unit works with staff from the Primary Care Trust to distribute information on the influenza campaign each autumn to all general practices in Harrow. The government target is that at least 70 per cent of those aged 65 and over should receive influenza vaccination in 2001.

For the winter of 2002/3, vaccine coverage at practice level ranged from 51 to 86 per cent. The average, 69 per cent, was the same as the national average.

## 5.2 HIV and AIDS

There were 166 people living with HIV in Harrow during 2002. This is a fairly small proportion of the total for North West London (see Figure 5.3).

**Figure 5.3** Number of people living with HIV in North West London by borough of residence



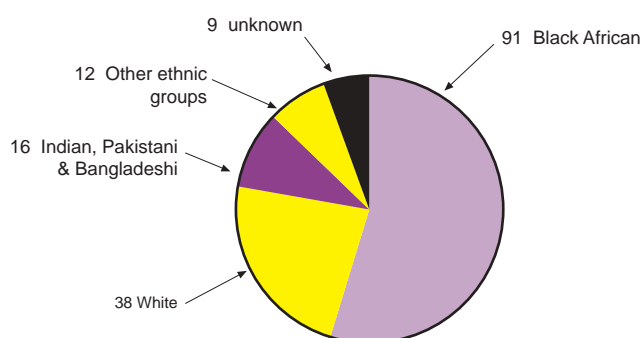
The main route of infection in Harrow residents was sex between men and women (69 %) (Table 5.4). A high proportion of people living with HIV in Harrow are Black African (55 %), though many are white (23 %), or Asian (10 %) (see Figure 5.4).

**Table 5.4** Route of infection of people with HIV living in Harrow 2002

| Probable route            | Total |
|---------------------------|-------|
| Sex between men           | 31    |
| Sex between men and women | 114   |
| Not identified/rounded §  | 21    |
| Total                     | 166   |

Notes § including injecting drug use, blood/blood products recipient, mother-to-child transmission and unknown  
Source SOPHID

**Figure 5.4** Numbers of Harrow residents with HIV, by ethnic group, 2002



Note The 12 within 'Other ethnic' includes people of Black Caribbean, Other/mixed, Other Asian/oriental origin  
Source SOPHID

The Department of Health recommends that pregnant women are screened for HIV so that treatment can be started to reduce the risk of vertical transmission. Without treatment, about 30 per cent of babies would become infected. Good progress has been made in Harrow in encouraging mothers to take an HIV test. During 2002, the antenatal unit at Northwick Park Hospital tested 97 per cent of all women attending and the Central Middlesex Hospital 99 per cent.

Results of a survey by the Communicable Disease Surveillance Centre for 2000–01 show that in Harrow all maternal HIV infections were diagnosed before delivery.



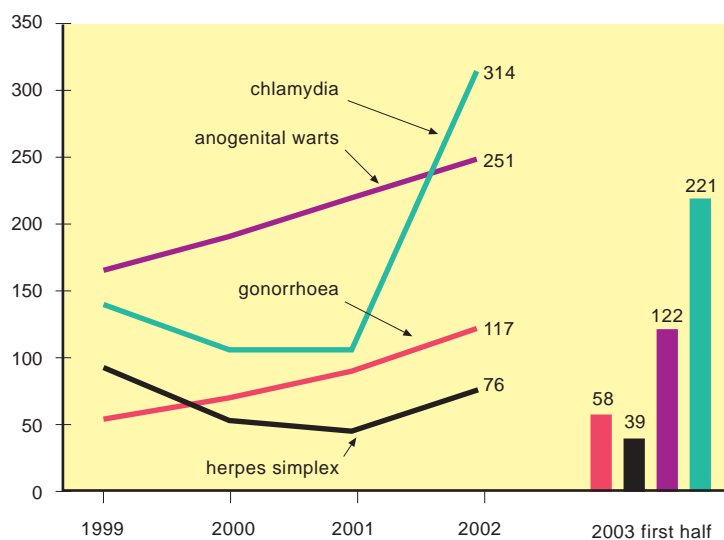
## 5.3 Sexually transmitted infections

The most common sexually transmitted infections are genital chlamydia, gonorrhoea, herpes simplex and anogenital warts. Data on these infections are collected by genitourinary medicine clinics, but they are not available by borough of residence of the patient, because the data are anonymised before being sent to the Communicable Disease Surveillance Centre.

Figure 5.5 shows trends in sexually transmitted infections presenting to the Northwick Park Hospital Genitourinary Medicine Clinic for 1999 to the first half of 2003. Chlamydia diagnoses increased enormously in 2002. Increased levels may be partly due to the laboratory changing to a more sensitive laboratory test (a nucleic acid amplification test – previously ELISA was used). However, national data show that chlamydia incidence is increasing rapidly over the whole country, so part of the increase may be real. Gonorrhoea and anogenital warts also show clear increases in incidence, patterns reflected in national data.

**Figure 5.5** Sexually transmitted infections diagnosed in Northwick Park Genito Urinary Medical Clinic, 1999 to mid 2003

Number of infections diagnosed



Source North West London Hospitals Trust, and Communicable Disease Surveillance Centre