

***Communicable Disease***

A significant challenge is to protect public health by controlling and preventing outbreaks and sporadic cases of communicable disease. Under the *Health Protection Regulations 2010*, registered medical practitioners are legally required to notify the local authority of cases of notifiable communicable disease and diagnostic laboratories are required to notify the local authority of organisms which cause human disease. Cardiff Council Communicable Disease Team (CCCDT) and Public Health Wales (PHW) routinely investigate all notifiable cases of communicable disease to attempt to establish the source of the illness, detect outbreaks, prevent the spread of infection, educate the public and identify risk factors contributing to the specified illness. Many investigations of both sporadic and outbreak cases lead to application of specific health improvement and public health interventions.

The primary objective in the management of an outbreak is to protect public health by identifying the source of the outbreak and implementing necessary measures to prevent further spread or recurrence of the infection. The successful management of outbreaks is dependent upon good and timely communication between the Local Authority, the Cardiff & Vale University Health Board (UHB), Public Health Wales and all interested parties. These organisations work to the *Communicable Disease Outbreak Plan for Wales*, a national plan for dealing with major outbreaks of communicable disease.

When an outbreak is declared, the investigation, management and control is handled by an Outbreak Control Team (OCT). The OCT is comprised of officers from CCCDT and specialist staff from PHW including:

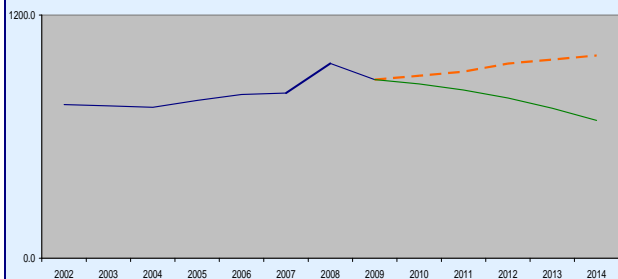
- the consultant in Communicable Disease Control
- microbiologists from Cardiff microbiology laboratory
- the regional epidemiologist from the Communicable Disease Surveillance Centre
- staff from the Cardiff & Vale UHB.

Depending on the nature of the outbreak, where necessary, professional staff from other relevant organisations may be co-opted onto the OCT, such as the Food Standards Agency, Welsh Water or the Veterinary Laboratory Agency. Small outbreaks and incidents occur most frequently.

## Headline Indicators and how are we doing?

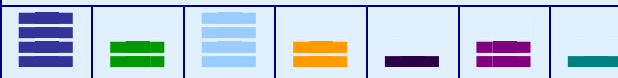
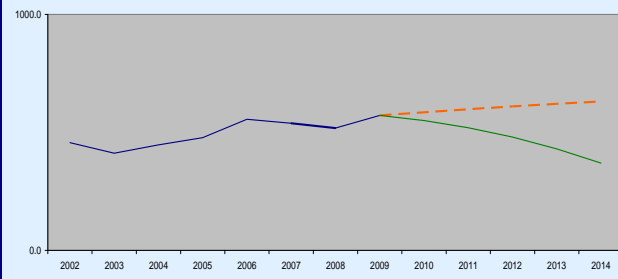
### 1. Cases of suspected Food Poisoning reported in Cardiff

(Cardiff Council / Public Health Wales data)



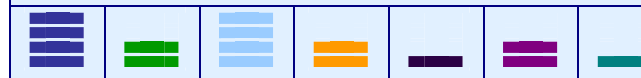
### 2. Cases of Campylobacter reported in Cardiff

(Cardiff Council / Public Health Wales data)



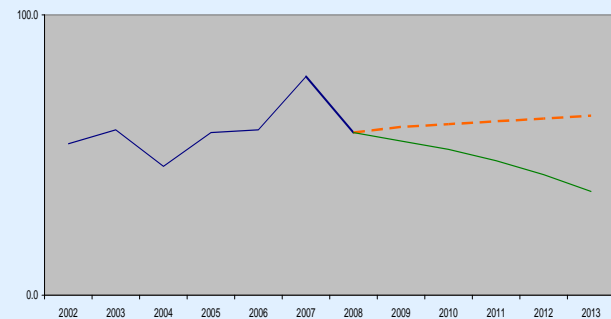
### 3. Outbreaks of Gastro-intestinal infection in Cardiff

(Cardiff Council / Public Health Wales data)



#### 4. Tuberculosis (TB) cases in Cardiff and Vale of Glamorgan

(Public Health Wales)



#### Data Development:

- Enhanced surveillance programme for sporadic cases of Campylobacter will commence in January 2011, led by CCCDT. This supports the ongoing project managed by the FSA and PHW, mapping sporadic cases of Campylobacter and Salmonella for all local authorities in Wales.
- Ongoing enhanced surveillance programme of sporadic cases of Cryptosporidiosis associated with swimming pool exposure managed by CCCDT for all local authorities in Wales.
- Evaluation of health improvement interventions

#### Key:

--- The route we will take if we do nothing

— The curve we want to turn

The bars under each graph represent how the indicator impacts on the seven Cardiff outcomes for the city as seen below:



#### Story behind the baselines

- Health promotion plays a vital role in preventing the incidence and spread of communicable diseases and maintaining high immunisation rates.
- Although data shows that the number of confirmed and suspected cases of reported food poisoning remains relatively stable it is acknowledged that food poisoning is under reported across the U.K.
- Increases and decreases in the number of confirmed cases of Campylobacter will not only be influenced by consuming contaminated food and exposure to other risk factors but also by heightened public awareness and changes in national and local reporting systems. The enhanced surveillance programme mentioned within Data Development aims to better understand the influence of these factors.
- There has been a substantial increase in outbreaks of Gastro-intestinal infection between 2007 and 2009. The most likely explanation for the increase in these figures is the introduction of a health improvement intervention undertaken by CCCDT in schools, care homes, nurseries and conferencing facilities which raised awareness of suspected Norovirus infections and provided guidance on the reporting, prevention and control of infection.
- In 2009, of the 28 outbreaks of Gastro-intestinal disease that occurred in Cardiff, 27 were suspected Norovirus outbreaks associated mainly with school or care home environments that were relatively contained.
- The most recent use of the *Communicable Disease Outbreak Plan for Wales* was in summer 2010 when an OCT was formally convened to investigate an outbreak of Legionnaires' Disease in South Wales affecting 22 cases.
- In summer 2009, surveillance identified an increased incidence of sporadic cases of Cryptosporidiosis associated with swimming pool exposure. Intensive investigations led to the introduction of a health promotion awareness campaign targeting all users of Council and private swimming pools, supported by a training programme on the 'effective management of Cryptosporidium in swimming pools' presented to all swimming pool operators in Cardiff and the introduction of an enhanced surveillance project.
- The *Health Improvement Plan* has been established to target a number of other priority challenges. Recent initiatives include:
  - Development and publication of a *Hand Hygiene Toolkit* for Cardiff schools which provides supporting literature to enable every school in Cardiff to promote, encourage and sustain effective and frequent hand washing by pupils during the school day
  - Production of practical guidance to nurseries, schools and care homes on the control and prevention of Norovirus
  - Food Safety Week 2010 supported the promotion of safe food preparation practices to reduce food poisoning associated with Campylobacter
- Approximately 825 cases of infectious Gastro-intestinal disease are followed up each year, including cases of E. coli O157, Hepatitis A,

Cryptosporidiosis, Legionnaires' Disease, Campylobacter and Typhoid fever. These all require assessment and intensive follow up.

- Around 50 cases of TB are diagnosed in the area annually. All are followed up by the Cardiff and Vale UHB Tuberculosis Unit and their contacts screened. In addition, the unit vaccinates around 1,000 babies annually at higher risk of TB.
- Other diseases continue to pose an infectious disease threat to the population. In 2009 PHW followed up 28 cases of meningococcal disease. All close contacts were identified and administered medication. Whooping cough and mumps are endemic in the area with confirmed cases reported every year. Measles remains a constant threat, and all suspected cases are followed up with salivary testing kits.

**Partners with a role to play**

- |                   |                       |                                       |
|-------------------|-----------------------|---------------------------------------|
| • Cardiff Council | • Public Health Wales | • Cardiff Health Alliance             |
| • NHS             | • Third Sector        | • Communities and Citizens in Cardiff |
|                   | • Private Sector      |                                       |

**What are we going to do?**

- Strengthening the capacity of the TB unit to deliver screening and control activities
- Strengthening the arrangements for delivery of infection control in the community
- The appointment of an immunisation and vaccination co-ordinator within the UHB
- Piloting self administered questionnaire for specified infections in conjunction with identifying exposure patterns
- Customer satisfaction questionnaire
- Preparation of reports for public health incidents of note
- Monitoring norovirus notification following Norovirus intervention programme in schools
- Monitoring effectiveness of Campylobacter interventions
- Implementation and evaluation of *Hand Hygiene Toolkit*
- Extend the breakfast club focus group idea into other industry sectors
- Launch the *Health Improvement Standards*.