



Tuberculosis in the UK April 2007

Introduction

Tuberculosis (TB) remains one of the leading infectious causes of adult mortality in the world. Every year 9 million people develop active TB disease and 2 million die. Much of TB's resurgence corresponds to the HIV epidemic especially in Africa, where two-thirds of HIV patients also carry TB. Today, Eastern Europe and Russia are the new TB hotspots. In an increasingly small world of mass transportation and displaced populations *TB anywhere is TB everywhere*. In the early 90s New York City witnessed an outbreak of drug-resistant TB and spent approximately \$1 billion fighting 4,000 cases. Today, London is fast becoming the TB capital of the western world with double the level of New York's case load during that outbreak.

TB in the UK – the numbers

In England cases fell progressively until the mid-1980s but started to rise again in the early 1990s.

- The largest rise in TB cases was seen in 2005 when it increased by 10.8%, from 7,321 cases in 2004 to **8,113 in 2005** and London recorded the highest number (3479), with a rate of 46.3 new cases for every 100,000 population.
- Numbers in non UK born population were the highest - 5,310 in 2005. These individuals may have been previously infected overseas, or more recently infected in the UK or as a result of travel back to countries with high rates of TB.
- In 2005 Indian/ Pakistani/ Bangladeshi group recorded 3,075 cases followed by Black African (1,932) and White (1,721).
- HIV-positive individuals, healthcare workers, homeless people, prisoners, people who misuse drugs and alcohol and immigrants from certain areas (with high rates of HIV/inadequate health care) are at increased risk.
- In 2004, 411 people in the UK died from TB.

TB – the cure

- The BCG (Bacillus Calmette-Guerin) vaccine introduced in the UK in 1953 is most effective at preventing severe forms of TB in infants and young children.
- A BCG programme to target children less than a year old, who live in a high incidence area or have a parent / grand parent from a high incidence country (>40 cases per 100,000 population per year) was advised in 2005.
- Standard treatment in the UK is usually a combination of initially four special antibiotics - isoniazid, rifampicin, pyrazinamide, and ethambutol too for about two months. This is followed by continuing with rifampicin and isoniazid for a further four months.

Bovine tuberculosis

Another bacterium of the Mycobacterium tuberculosis family called *Mycobacterium bovis* (*M.bovis*) is a rare cause of infection in the UK. It is passed on from contaminated unpasteurised milk or from infected cattle (now rare in the UK after an eradication campaign started in 1950). The current risk posed by *M.bovis* to human health in the UK is small. 137 human *M.bovis* cases were reported to the HPA between 2000 and 2005 (*Focus on TB*, HPA, Nov 2006).

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For further information on the patterns of TB in England, TB incidents and outbreak surveillance, the extent of resistance to anti-tuberculosis drugs, recent trends in human cases of bovine tuberculosis and the outcome of treatment in patients please visit:

http://www.hpa.org.uk/infections/topics_az/tb/menu.htm