ADVICE FOR NEWLY-ARRIVING UNIVERSITY STUDENTS ON VACCINE-PREVENTABLE INFECTIOUS DISEASES

Meningococcal infection

Meningococcal infection is a serious illness caused by a bacterium known as meningococcus. There are several different groups of meningococci and cases of group B meningococcal infection continue to occur in the UK. Since the introduction of vaccination against group C meningococcus in the UK in 1999, infection due to this bacterium has become rare.
In 2013, an adolescent MenC booster dose was introduced to improve protection in teenagers and reduce their risk of catching the infection as university freshers. From autumn 2015, a new meningitis vaccine, MenACWY conjugate vaccine, has replaced the MenC vaccine in the adolescent schools programme. This is in response to a rapid increase in cases of a highly aggressive form of meningococcal group W (MenW) disease.
The new vaccine is also available to new UK university entrants (first time entrants to higher education in a UK university setting), including international students, up to their 25th birthday. Any 'freshers' in the 17-24 year age group who request it can be vaccinated. New entrants who have already received a MenC vaccine over the age of 10 years should still receive MenACWY conjugate vaccine to ensure protection against the additional groups A, W and Y. The MenACWY conjugate vaccine can be administered at any interval after MenC vaccine.
*Students are strongly advised to have the MenACWY conjugate vaccination **before arriving in Cambridge**. If this is not possible, please discuss it with your doctor or college nurse as soon as possible after your arrival.*
Further information can be found at http://www.nhs.uk/Conditions/vaccinations/Pages/men-acwy-vaccine.aspx.

Mumps and measles

Mumps and measles can be serious infections. We continue to see cases and clusters of both these diseases. In 2013, there has been a shift in measles cases towards secondary school age groups. Mumps cases in 2013 mainly occurred in young adults aged 17-28 years; about half had received at least one dose of MMR vaccination in childhood.

Many people now in their teens and twenties have either not been immunised at all or have had only one dose of MMR vaccination. People born in the UK after 1980 are likely to be susceptible to measles and mumps if they have not had two doses of MMR. This is because they are less likely to be immune as a result of exposure to natural disease.

*MMR vaccine can be given to people of any age. National policy is to provide **two** doses of MMR vaccine at appropriate intervals for all eligible individuals. We strongly recommend that all students ensure that they have had **two** doses of the MMR vaccine before coming to university.*

Tuberculosis (TB)

TB is a serious but curable disease. Like most countries worldwide, the UK has been seeing an increase in TB that is highest in London and the other major cities where the risk factors tend to be concentrated. The TB rate is much higher in the foreign-born population than in the UK-born, the rate being also higher in certain ethnic groups in the first few years after they enter the country. In the UK, those at most risk of developing TB disease include people who are close contacts of a person with infectious TB and those who have visited, lived or worked for a long time in countries with a high rate of TB. Countries that have high rates of TB over 40/100,000 of the population are listed at
https://www.gov.uk/government/publications/tuberculosis-tb-by-country-rates-per-100000-people.

Diagnosis of infection in young people can be delayed because often neither they nor their doctor consider it as a possibility. If you develop symptoms, such as a persistent cough that lasts for three weeks or more; appetite and weight loss; and fever and sweating at night, you should discuss this with your doctor or college nurse.

Influenza

Influenza is an acute viral infection of the respiratory tract. There are three types of influenza virus: A, B and C. Influenza A and B are responsible for most illness. Influenza is highly infectious with an incubation period of one to three days. Serious illness and death from influenza are highest among young babies, older people and those with underlying disease, particularly chronic lung and heart disease, or those who are immunosuppressed.

The currently available influenza vaccines give 70 to 80% protection against infection with influenza virus strains well matched with those in the vaccine. The vaccine is given annually between October and December. Protection afforded by the vaccine lasts for about one year.

If you suffer from chronic lung, heart, kidney or liver disease or have diabetes or are otherwise immunosuppressed, please discuss this with your doctor or college nurse.

For further information see https://www.gov.uk/government/collections/seasonal-influenza-guidance-data-and-analysis.

Further information

The Cambridge Student Health website (http://www.camstudenthealth.nhs.uk), which has been developed by local GP surgeries, provides information and guidance about a wide range of health matters and services for University students.

Public Health England

Protecting and improving the nation's health

Factsheet: Tuberculosis (TB)

What is Tuberculosis (TB)?

Tuberculosis (TB) is an infectious disease that usually affects the lungs, but it can affect any part of the body. It is caused by bacteria called '*Mycobacterium tuberculosis*'. The bacteria can survive in the body for many years in a dormant or inactive state whereby people are infected but show no signs of TB disease. When the bacteria are awake and dividing people are said to have 'active TB'.

What are the symptoms?

The most common symptoms are persistent cough that does not get better with usual antibiotics; loss of weight, fever, heavy night sweats, tiredness and less commonly coughing up blood and in some cases swollen glands.

How common is it?

With better housing and nutrition and effective treatment TB had become uncommon in the last century, but over the last 20 years the numbers in the UK have been rising slowly. About 9000 people were diagnosed with TB in the UK in 2009, just over 14 persons in every 100,000 of population. London has higher rates compared to the rest of the UK and the number of TB cases has doubled since 1980s, accounting for more than 3000 cases in 2009.

How do you catch it?

TB is not easily caught. Only about 30% of healthy people closely exposed to TB will get infected and of those only 5% -10% will go on to develop active TB (usually in the first 5 years following infection). It is rare for children with TB to pass the infection to others – children get TB from adults with active respiratory TB. Those with TB can become non-infectious soon after beginning of treatment (usually 2 weeks) if they take the proper treatment as it is prescribed.

Who catches TB?

You have to be in close and lengthy contact (for example living in the same household) with someone with infectious TB in their lungs or throat. While anyone can catch TB some people are more at risk. These include people who:

- live in the same household as, or have been in close and lengthy contact with someone with infectious TB
- living in unhealthy or overcrowded conditions, including those who are homeless or sleeping rough
- have lived, worked or stayed for a long time in a country with a high rate of TB
- may have been exposed to TB in their youth when TB was more common in this country

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- are children of parents whose country of origin has a high rate of TB
- have been in prison, addicted to drugs or misuse alcohol
- are unable to fight off infection due to illness (such as HIV), some treatments or poor diet
- young children and very elderly people

What is the incubation period?

From infection to showing a response to a TB skin test may take 4-12 weeks. From infection some people may never progress to the actual (active) disease. If they do, it happens more commonly in the first 5 years after infection, but the bacteria may remain in the body for the rest of their life and cause the disease later, especially if the individual's immunity is weakened as a result of other serious infections (such as HIV), other diseases, or some treatments.

What should be done after exposure to someone with TB?

People diagnosed with active TB are assessed for infection risk to others. If the bacteria are found in their sputum, then their close contacts will be invited for TB screening to identify those who have been infected. Casual contacts such as friends, work colleagues and schoolmates, are only investigated if the TB patient is considered to pose a risk to them, for example if they had close and lengthy contact.

Screening will consist of a skin test (Mantoux test) which can be interpreted after 2 days or a blood test. A chest X-ray may also be carried out. Those who have a strongly positive skin test, or a positive blood test or an abnormal chest X-ray or who are unwell will be further investigated by the specialist TB team and may be treated with a course of antibiotics.

Is there any treatment?

TB infection with or without symptoms can be treated with special antibiotics. Treatment for the active form lasts at least 6 months. It is vitally important to complete the whole course of antibiotics as prescribed. If not, TB may return in a form that is resistant to some of the drugs and be much more difficult to treat. If TB is not treated properly, it may lead to serious illness and even death.

How can you protect yourself against TB?

The most effective way to prevent the spread of TB is by diagnosing people as soon as possible and make sure they have a full course of correct treatment.

BCG vaccine works best to prevent the most serious forms of TB in children but it does not prevent TB in all cases. It is offered to infants and children who are at higher risk of catching TB, for example infants born in areas with a high incidence of TB or those whose parents or grandparents were born in a country with a high TB incidence.

Further information can be obtained from NHS 111.

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