Brucellosis: factsheet for laboratory exposure

Introduction

Brucellosis is an infection that humans can get from animals (a zoonosis). It is rare in the UK, and cases are almost always acquired abroad.

Brucellosis can be acquired through various ways:

- eating or drinking unpasteurised dairy products contaminated with brucellosis (most common)
- breathing in *Brucella* organisms in a laboratory or in a slaughterhouse
- contact with infected animals leading to bacteria entering through the skin or mucous membranes

Laboratory workers are at risk of becoming infected from laboratory specimens, usually from working on cultures of *Brucella* in the bacteriology laboratory.

Is there a risk that I will get brucellosis?

If there has been an exposure to *Brucella* in your workplace, your manager will work with Public Health England and other national organisations to identify individuals who may be at risk of developing brucellosis. Depending on what you were doing at the time the *Brucella* cultures were handled, you will be told whether your exposure was of low or high risk. High risk exposures usually involve being in close proximity to the cultures or sniffing the plates.

I have been told that my exposure was “low risk”

If your exposure was low risk, then you will have a blood sample taken. This will be stored for future testing if needed. If you develop any of the symptoms of brucellosis (see below), then you should contact the nominated physician (you will be informed who this is) or your GP. With your consent, your GP will be informed of your exposure. You do not need to take any antibiotics after a low risk exposure.

I have been told that my exposure was “high risk”

If your exposure was high risk, then you will have a blood sample taken when you are first seen by your nominated physician (you will be informed who this is). You will...
then have blood samples taken again at 6 weeks and 24 weeks after the exposure. These are tested to look for evidence of infection, by detecting Brucella antibodies.

A three-week course of antibiotics is usually recommended if you have had a high risk exposure as this reduces the risk of developing brucellosis. Your physician will advise you further on these tablets. With your consent, your GP will be informed of your exposure and course of treatment.

If you develop any of the symptoms of brucellosis (see below), then you should contact the nominated physician or your GP.

**Is the advice the same if I am pregnant?**

If you are pregnant, you will still have the same blood tests as described above. Your physician, midwife and obstetrician will discuss the risks and benefits of taking antibiotics with you.

If you have any of the symptoms of brucellosis (see below), then you should contact the nominated physician (you will be informed who this is), your GP or obstetrician.

Transmission of brucellosis to infants through breast milk has been reported very rarely.

**Details of nominated physician**

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**Will my GP be informed?**

With your consent, a letter will be sent to your GP so that they are aware that you may have been exposed to brucellosis.

**What are the signs and symptoms of brucellosis?**

Brucellosis doesn't always cause symptoms, and the infection may persist for several months without you knowing.

In some people, symptoms will develop suddenly. In others, symptoms may develop gradually and be persistent or return again and again, lasting for years.

Typical symptoms include:
• a high temperature (fever)
• loss of appetite and weight loss
• sweating
• headaches
• fatigue (extreme tiredness)
• back and joint pain

These symptoms tend to last a long time and can make you feel very ill, but most people will eventually make a full recovery after treatment.

Brucellosis is rarely fatal in humans, although some cases can lead to life-threatening complications such as endocarditis (infection of the heart) and meningitis (infection of the membranes surrounding the brain and spinal cord) – particularly if left untreated.

Person-to-person spread of brucellosis is extremely rare.

Further information
NHS choices - http://www.nhs.uk/Conditions/brucellosis/Pages/Introduction.aspx

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