

Poultry and diabetics at risk from gas gangrene bug

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Gas gangrene, the notorious infectious disease of two world wars can still be a problem today. Professor Richard Titball of the University of Exeter, told the Society of General Microbiology Meeting at the International Centre, Harrogate today (Monday, 30 March) that *Clostridium perfringens*, the bacterium responsible for gas gangrene in people, can also cause necrotic enteritis in intensively raised chickens. This frequently fatal disease has significant financial implications for the poultry industry.

Intensive study of *C. perfringens* during World War 2 showed that the [bacterium](#) produces a potent toxin. Recent work using modern molecular genetic approaches have provided an insight into the role of this toxin in disease. It works in three ways: by promoting a reduction in blood supply to infected tissues; by increasing inflammation; and by having a toxic effect on the heart.

"Gas gangrene is not just a historical curiosity", said Professor Titball, "In the past it has been a major cause of death and disability in servicemen injured on the battlefield, although it is rarely a problem now because of the prompt treatment that casualties receive. However it does occasionally occur in the civilian population with [diabetes](#) patients, with the elderly being most at risk. In the future, the incidence of gangrene infection may rise in line with the increase in this age group in the general population. It is essential to understand how the toxin works to prevent future disease not only in diabetes sufferers but also in intensively reared animals".

Source: Society for General Microbiology

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