

Millions of contact lens users are at risk of eye-devouring amoeba that can turn them blind

- **Acanthamoeba parasite found in tap water, dust and swimming pools**
- **Causes painful infection that is 'potential problems for ever single contact lens wearer'**
- **Can eat its way through the cornea and even cause blindness**

By [Fiona Macrae](#)

Wearers must be dilligent about keeping their contact lenses clean, say scientists

Contact lens wearers are at the mercy of a bug that is found in tap water and gnaws through the eyeballs causing blindness, scientists have warned.

With the Acanthamoeba parasite also found in dust, in the sea and in showers and swimming pools, millions of people are at risk worldwide, including Britain's 3.7million contact lens users.

The actual number of infections is small but treatment is long, painful and not completely effective, meaning some Britons are left blind every year.

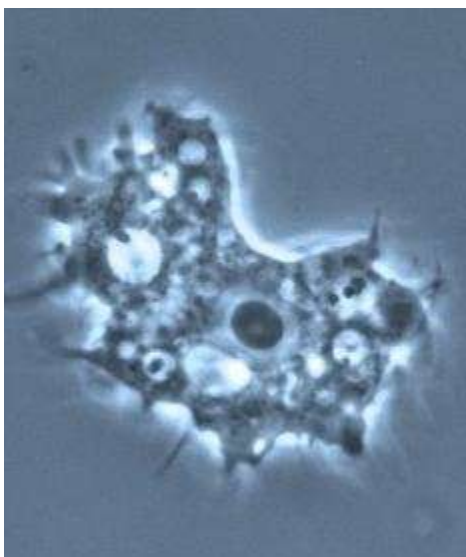
Fiona Henriquez, of the University of the West of Scotland, said: 'It is a potential problem for every single contact lens wearer.'

Professor Craig Roberts, of the Strathclyde University, who is working with Dr Henriquez to produce better contact lens cleaning solutions, said: 'It's absolutely everywhere.'

The British Science Festival in Aberdeen heard that Acanthamoeba, a tiny single-celled parasite, feeds on bacteria found on dirty contact lenses and cases.

When the lens is put in the eye, it starts to eat its way through the cornea, the outer layer of the eyeball and breeding as it goes.

Symptoms of include itchy and watery eyes, blurred vision, sensitivity to light, swelling of the upper eyelid and extreme pain.



Culprit: The Acanthamoeba parasite that lives in tap water and dust

Vision can be permanently damaged within a week, said Graeme Stevenson, an optician.

'Generally it leaves you with scarring. Your cornea is your window on life and if the infection penetrates in towards the third layer you are left with scarring, with a kind of frosty windscreen.'

He added that many of the 75 infections recorded each year in the UK occur because people fail to follow the instructions they are given by their optician.

'Usually a lot of it is non-compliance. It's patients rinsing their case out in tap water or rinsing their lenses out in tap water. Potentially something as simple as swimming or showering while wearing their lenses increases the risk significantly.'

Treatment includes Dettol-like eye drops, with patients initially being treated every 20 minutes, day and night and spending up to three weeks in hospital. The most severe cases are given cornea transplants.

Advice for avoiding the bug includes keeping lenses and cases clean and replacing them regularly.



The affect of Acanthamoeba on the eye of a contact lens wearer

The British Contact Lens Association advises against wearing contact lenses while swimming, unless goggles are also worn. And if contact lenses are kept in while showering, eyes should be tightly closed.

Dr Tara Beattie, of Strathclyde University, said: 'Millions of people wear lenses and don't have a problem. We don't want people thinking "we can't wear lenses any more".'

'That's not the case but what they need to do is be diligent about keeping them clean.'