

- E. coli meningitis is caused by bacteria which grow in the bodies of healthy people.
- Usually these bacteria do no harm, but some uncommon strains can cause serious disease.
- The vast majority of cases of *E. coli* meningitis are caused by a disease-causing strain known as *E. coli* K1.

Most cases of *E. coli* meningitis occur in newborn babies or babies under 3 months of age.

In the UK and Ireland adults and older children almost never get *E coli* meningitis unless they have health problems that suppress their immune system, or have had head injuries or surgery to the head so that bacteria can enter via the head wound. It may also occur in people who have a CSF shunt (a device for draining excess fluid from around the brain to relieve pressure).

Infection in babies may occur during delivery, or from bacteria acquired in hospital, or in the home. Premature and low-birth-weight babies are at higher risk of contracting meningitis.

Infection by *E. coli* and similar bacteria tend to cause septicaemia (blood-poisoning) when it happens at birth or in the first two days after birth. When it occurs in babies more than 48 hours old it is more likely to cause meningitis.

Until about 1983, *E. coli* was the most common kind of neonatal (newborn) meningitis in the UK and Ireland, but since that time another kind, group B streptococcal (GBS) meningitis, has become more prevalent. It is estimated that *E. coli* causes about 20% of cases of neonatal meningitis, but less than 2% of cases of meningitis at all other ages. In developing countries, *E. coli* is a much more important cause of meningitis.

*E. coli* meningitis can be successfully treated with antibiotics, but all bacterial meningitis, particularly in newborn and premature babies, is serious. Although 85% of babies affected recover, the chances of making a perfect recovery are not as high as with more common forms of meningitis that tend to occur in older babies and children.

In the future, prevention of *E. coli* meningitis in newborn babies could be possible by vaccinating mothers-to-be, but, as yet, no vaccine has been developed.

*E. coli* meningitis is often grouped with meningitis caused by other bacteria because the disease process, typical age and health problems of those affected, and the outcome are similar. Other such examples include:

- Proteus
- Klebsiella
- Citrobacter
- Salmonella
- Pseudomonas
- Serratia
- Achromobacter
- Flavobacterium and Chryseobacterium
- Bacteroides

*E. coli* meningitis is the most common of these forms.

Where can I go for further information and support?

Freefone helpline UK 080 88 00 33 44 Ireland 1800 41 33 444 email helpline@meningitis.org

Visit our website www.meningitis.org