

[Open Peer Review on Qeios](#)

Escherichia coli strain O157:H7

National Cancer Institute

Source

National Cancer Institute. *Escherichia coli strain O157:H7*. NCI Thesaurus. Code C86883.

A species of facultatively anaerobic, Gram negative, rod shaped bacterium assigned to the phylum Proteobacteria. This species develops flagella and pili based on its environmental needs. Belongs to the class of enterohemorrhagic E. coli which produces Shiga-like toxins causing hemorrhagic diarrhea which can occasionally develop into kidney failure, most commonly affecting young children and elderly. This serotype differs from other pathogenic E. coli as it is negative for invasiveness (Sereny test), adheres through E. coli common pilus, and doesn't produce heat stable or heat labile toxins. Human infection is commonly caused by the consumption of undercooked ground beef or unpasteurized milk or juice or exposure to contaminated lakes, pools or drinking water.