

Pathogen	Properties	
Helicobacter pylori	Gram –ve , spiral , • flagellated (4 – 6 // sheathed) , only human reservoir (no animals) Slow growing , requires complex media , microaerophilic (requires CO2 , O2 and N2) Oxidase , catalase and urease +ve	Become rod – like // coccoid in prolonged culture
H. cinaedi	• Single polar flagella // homosexual men & rodents	
H. fenneliae	• Single polar flagella // homosexual men & rodents	



its special medim contains : venomycin , polymyxin and trimthoprim (skirrow)

at 37temp for 3 - 7 days

transmission by oral - oral
OR fecal - oral

related to poor living & overcrowding & inadequately disinfected endoscopes & with age increases the possibility

H. pylori

? Regarding to age :

Age	Percentage
Below 40	20%
Above 60	50%
Children between(2 – 8)	<u>Yearly</u> : 10% in developing countries // 0.1% in developed

Pathogenesis:

The structure	Its role
Sheathed flagella	Motile / enables penetration into viscous environment (mucus)
Adhesins	Hemagglutinins , Salic acid binding adhesins
Mucinase	Degrades gastric mucus; Localized tissue damage
Urease	Converts urea into bicarbonate & ammonia Localized tissue damage & Neutralize the local acid environment
Superoxide dismutase and Catalase	Protection from phagocytosis & intracellular killing
vacuolating toxin and cytotoxin	Epithelial cell damage



