19th Century British Theories about Cholera Transmission

whether or not cholera spreads depends on what we breathe or on what we eat/drink

Contagious:

Victims reproduce the morbid matter/ poison in their bodies, so they are able to transmit the disease to others.



THROUGH INHALATION

People infect each other through the air

Called infection at the time; victims may infect anyone who inhales the morbid matter emitted by their skin and breath.



THROUGH INGESTION

People inadvertently pass morbid matter to others via ...

eg., by dirty hands; or if a victim's vomit or diarrhea contaminates food or water consumed by others..

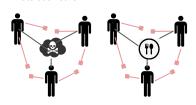
 \rightarrow (Snow's theory) gradually gains adherents who consider it the most plausible theory.



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Non-contagious:

Since atmospheric changes produce the morbid cholera matter that people may inhale or ingest, they cannot communicate it to each other.





GENERAL ATMOSPHERE



Earth exudes mysterious organic matter that contaminates the upper atmosphere and spreads via prevailing winds.

→ Generally rejected after evaluating evidence from 1831–32 cholera epidemic.

LOCAL ATMOSPHERE



Breathing air in filthy localities causes blood disorders characteristic of cholera.

→ proposed in 1830s for all non-contagious epidemic diseases; widely accepted for cholera from 1849-90s.



Blood absorbs morbidly contaminated food and drink from the stomach.



→ began during 1849 epidemic, increasingly accepted by localists until

ELEVATION



(Farr's theory) Cholerine (choleraic morbid matter) on water surfaces evaporates and eventually settles in greatest quantities at lowest elevations.

→ Modified after 1866 to accommodate Snow's theory.

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Non-Contagious & Contagious

Certain situations temporarily promote person-to-person transmission by non-contagious victims.





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CONTINGENTLY CONTAGIOUS

An atypical (contingent) suspension of non-contagion due to severe overcrowding and poor ventilation in filthy settings, correctable by sanitary improvements.

→ Primary non-contagionist explanation for incontestable instances of person-to-person transmission for most of the century.