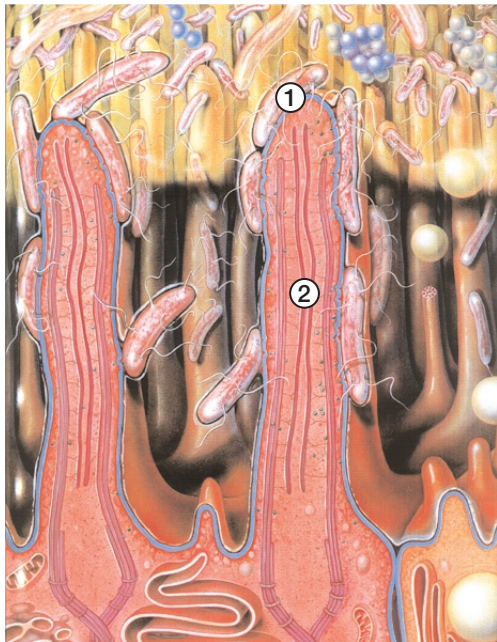


Bacteria have developed different mechanisms to facilitate the invasion of respiratory tissues. *Bordetella bronchiseptica*, mycoplasmas and staphylococci attach to the ciliar epithelium and induce ciliostasis, thereby crippling one of the most important defense mechanisms.

They are also facultative intracellular parasites that may escape the host defense system and later cause recurrence of the infection (12).

*Pseudomonas* damages the host tissue directly and is able to increase mucus viscosity to make it less elastic and less transportable, whereas other bacteria inhibit or alter the function of alveolar macrophages and intraluminal neutrophilic granulocytes (11),(13).

### **Bordetella on ciliar epithelium**



- (1) *Bordetella bronchiseptica* acts as a primary pathogen because of its ability to attach to, and paralyze, cilia of the respiratory epithelium.
- (2) Since efficient clearance of mucus and organisms via the mucociliary escalator can no longer occur, the organism persists for weeks in the airway.

#### References:

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