Humidity Range (low-medium-high) is crucial for Infection Risk by Airborne Microbes, **Comfort and Disease of Airways**



Microbes suspended in Droplets "Wet Aerosols"

from Airways

from **Intestine** and **Body Fluids**

Vomiting

Excretions

Faeces

by Everyday and Medical **Activities (Aerosolisation)**



from Skin, Clothes, Shoes and stirred up "Dust"

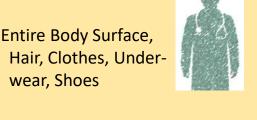
Carriers "Dry Aerosols"





Hand Washing Hand Dryer

> Bronchoscopy Colonoscopy etc.



by **Breathing** Coughing **Talking**



Invasive Diagnostic

Toilet Flushing

"settled Dust" as Fomite resuspended by **Human Activity & Airflow**

low Humidity < 50 % RH



high Infection Risk

low Comfort

Disease Risk of Airways

low Infection Risk

> 50 % RH



high Comfort no Disease Risk of Airways high Humidity ≈ 100 % RH



high Infection Risk



low Comfort Disease Risk of Airways



Settling velocity



Risk & Exposure

rel. Humidity

Re-Suspension

Aggregation