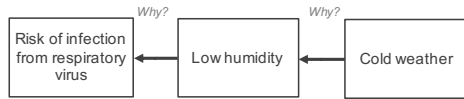




Why a Humidifier May Lower Your Chance of Getting a Respiratory Virus

The causes related to a seasonal increase in respiratory viruses, like influenza are complex. One promising contributor found via research is the possible role that humidity plays. A key study analyzed data over a 30-year period showed that a drop in absolute humidity correlates mostly with the rise in influenza-related deaths. So how does humidity, which is lower in winter months, affect our risk?



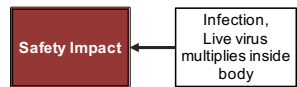
The ability to thoroughly explain the causal relationships could reveal opportunities to mitigate the risk of spreading and contracting other respiratory viruses.

Cause Mapping® Method

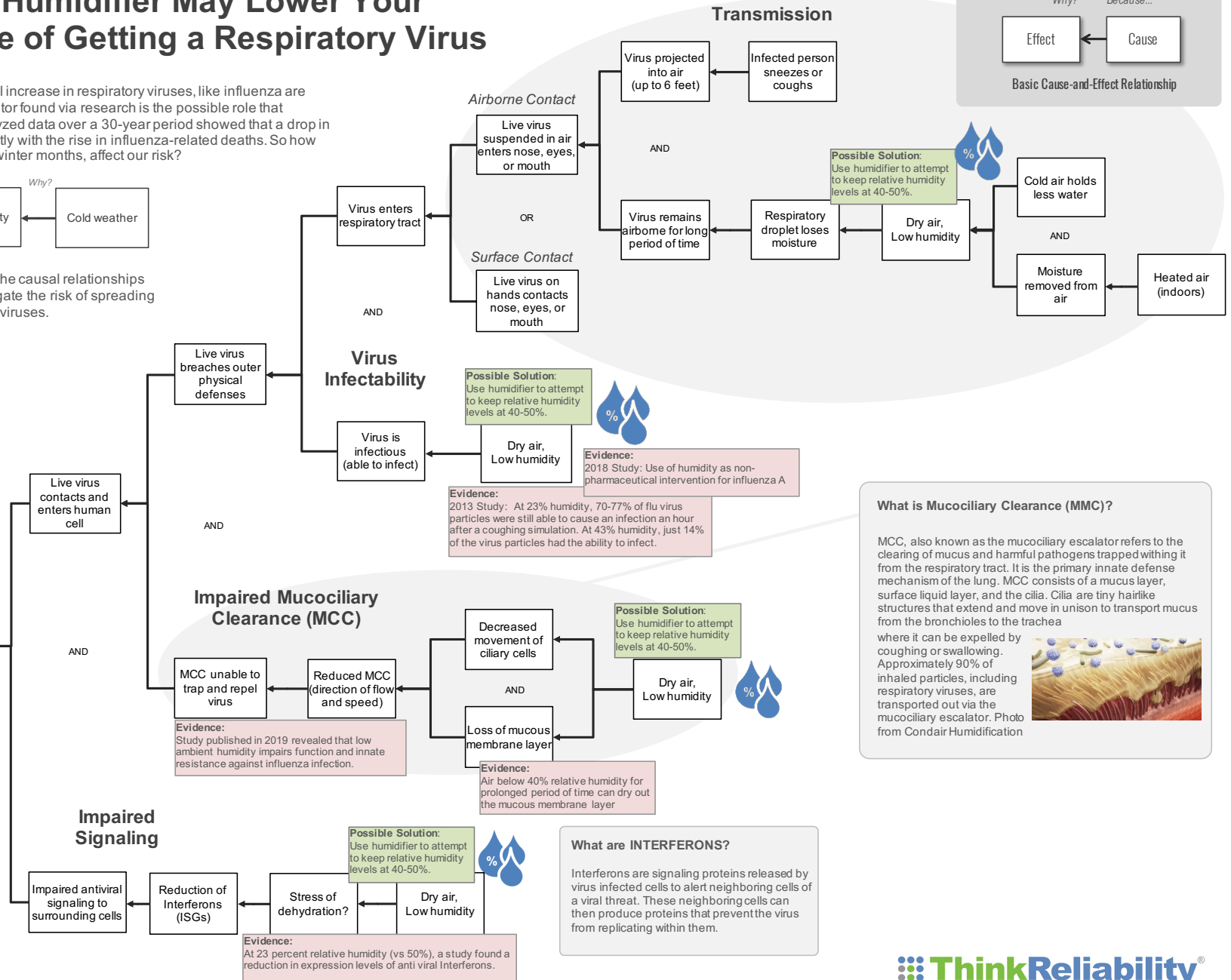
Why? Because...



Basic Cause-and-Effect Relationship

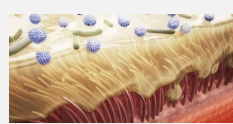


An infection occurs when virus is able to penetrate a cell and use the cell to replicate. The newly created viruses are released to infect neighboring cells.



What is Mucociliary Clearance (MMC)?

MCC, also known as the mucociliary escalator refers to the clearing of mucus and harmful pathogens trapped within it from the respiratory tract. It is the primary innate defense mechanism of the lung. MCC consists of a mucus layer, surface liquid layer, and the cilia. Cilia are tiny hairlike structures that extend and move in unison to transport mucus from the bronchioles to the trachea where it can be expelled by coughing or swallowing. Approximately 90% of inhaled particles, including respiratory viruses, are transported out via the mucociliary escalator. Photo from Condaire Humidification



What are INTERFERONS?

Interferons are signaling proteins released by virus infected cells to alert neighboring cells of a viral threat. These neighboring cells can then produce proteins that prevent the virus from replicating within them.