

## Explanation about Bipolar ions reduction of viruses

Release of bipolar ions in a room/ area starts a chain reaction due to charged oxygen in its vicinity.

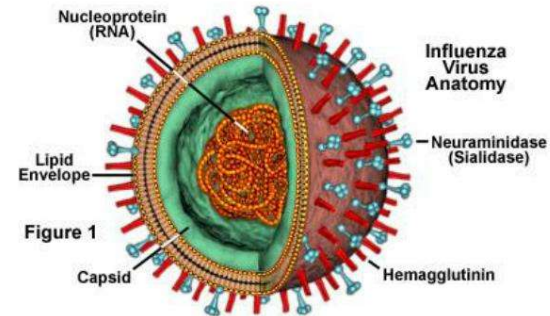
Unlike other micro organisms viruses can not live on their own as they are just a strand of RNA (as is MS2 or Corona Virus) with protein cover.

The bipolar ions (charged oxygen) immediately react with hydrogen in the protein cover & dehydrates, effectively destroying the virus.

This virus then is unable to affect humans or reproduce to add more viruses.

Basically the ions in the air surround the hemagglutinin (VIRAL PROTEIN) - surface proteins that trigger infection & a chemical reaction ensues, which destroys hemagglutinin to deactivate virus.

Influenza (Flu) virus structure



See: <http://micro.magnet.fsu.edu/cells/viruses/influenzavirus.html>

## Mechanism for Inactivating Airborne Virus

The positive and negative ions surround the hemagglutinin (surface proteins that form on organisms and trigger infections) and change into highly reactive OH groups called hydroxyl radicals ( $\bullet\text{OH}$ ).

These take a hydrogen molecule from the hemagglutinin and change into water ( $\text{H}_2\text{O}$ ). The ions destroy the virus surface structure, for example its envelopes and spikes, on a molecular level. As a result, the virus cannot infect even if it enters the body.