Air Ionisers

PROJECT SAFEGUARD

Reduce aerosols from the air in poorly ventilated spaces

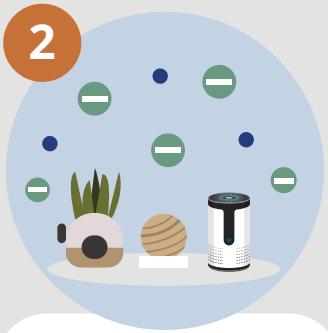
Inactivates viruses (>97%), allergens, mould and germs[1]

[1]Ionising air affects influenza virus infectivity and prevents airborne transmission (2015), taken from Scientific Reports

1

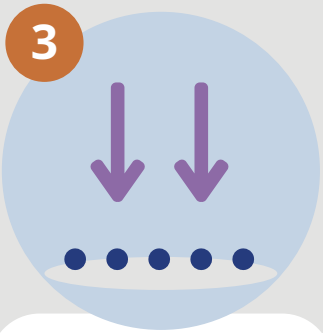
Speech droplets disperse into **tiny droplets known as aerosols**

2



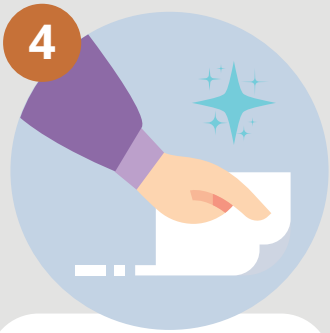
Ionisers **generate negative ions** into the air

3



Charge up aerosol particles, causing them to **stick to surfaces**

4



Viruses can be killed by **disinfecting high-touch surfaces frequently**

Plant and Natural Fibre Ionisers

- Generate up to a million times more negative ions than a normal plant
- Produces negligible ozone
- Environmentally friendly

May generate slight static charges when touching the plant

(lower than household electrical appliances)

Made of natural coconut fibres

Produces no static shock

Ady Suwardi et al. The Efficacy of Plant-based Ionizers in Removing Aerosol for COVID-19 Mitigation, Research, 2021, Article ID 2173642
https://spj.sciencemag.org/journals/research/aip/2173642/

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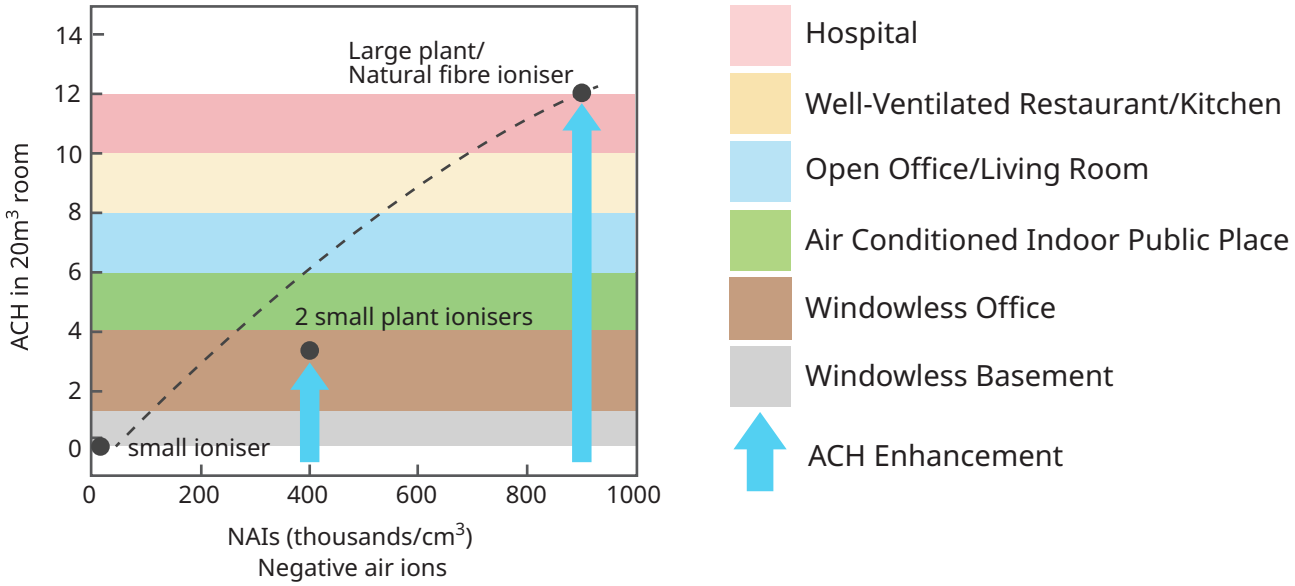
Air Change per Hour (ACH)



The Centers for Disease Control and Prevention (CDC) recommends a **minimum ACH of 6**[2] for patient-care areas including hospitals

A large plant or a natural fibre ioniser in a 20m³ room achieves an **ACH over 12**, which exceeds ventilation requirements for hospitals, to reduce the spread of aerosols

Clean air delivery rate (**CADR**), a common specification in many ionisers/air purifiers, refers to the capacity to deliver clean air in indoor spaces

A **large plant or a natural fibre ioniser** with CADR of 240 m^3/hour will create ACH of **24** in a 10 m^3 room, but will only achieve ACH of **12** in a 20 m^3 room

An **air purifier** with CADR of 100 m^3/hour will create ACH of **10** in a 10 m^3 room, but will only achieve an ACH of **5** in a 20 m^3 room

[2]Guidelines for Environmental Infection Control in Health-Care Facilities (2003), taken from the Centers for Disease Control and Prevention (CDC)

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