

# Case Study

## Air Purification, Infection & Odour Control



**PureAir Fans Kill Bacteria & Viruses  
In The Air & On Surfaces**

**Tandara Lodge**  
Community Care Inc.



### Tandara Lodge Community Care - Residential Aged Care Facility

Tandara Lodge operates a 46 bed (high and low care) Residential Aged Care Facility for permanent, respite and palliative residents, as well as providing a range of health services to the local community.

#### Challenge

How can you protect a care home community from the threat of bacterial and viral infections? Even the most diligent cleaning and disinfection routines cannot completely remove microorganisms from the air and surfaces – which are continually being replaced by coughs, sneezes and contaminated hands.

At the Tandara Lodge care home community, managers were keen to find ways to reduce the annual occurrence of influenza outbreaks and protect their residents from seasonal diseases.

#### Solution

Airius fans are typically used for destratification & circulation, but can also be factory-fitted with an active air and surface purification PHI cell. This technology charges the air with particles that neutralise bacteria, viruses and volatile organic compounds in the air and surfaces. Because Airius systems are designed to run 24/7, the benefits of the PureAir Series is profound. With PureAir, the air is continually replenished with cleansing particles. This reduces the volume of pathogens that can exist in the air and on surfaces by up to 99%.

#### Results

The effect of Airius PureAir Series may be invisible, but the results are unmissable:

- 0 notifiable outbreaks in 5 years
- Significantly reduced staff sickness & absences
- Reduced energy costs due to destratification
- Less suffering & sickness from seasonal diseases
- £1,000's saved on outbreak containment & clean-up

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## PureAir Technology Explained

### How does the PureAir Series PHI Cell kill bacteria and viruses in the air and on surfaces?

The PureAir Photohydroionisation (PHI) Cell, manufactured by RGF Environmental, one of the world's leading specialists in air, water and food purification, is a kind of UV light that emits advanced oxidation plasma. Included as part of a fan system, the PHI cell distributes hydro-peroxides, superoxide ions and hydroxide ions throughout the space, neutralising 99% of micro-organisms in the air and on surfaces.

PHI cells produce a group of oxidants known as hydroperoxides. Far from new to our world, hydroperoxides have been around for 3.5 billion years – and today they are commonly used in food processing environments, where they offer an anti-microbial treatment without leaving chemical residues.

## Benefits of PureAir Technology

Choosing an Airius PureAir Series destratification fan with its integrated PHI Cell is a simple way to reduce bacteria, viruses and odours in your environment.

- Continuous air purification benefiting air and surfaces
- Easy to install in any environment
- Kills more than 99% of bacteria and viruses
- Reduces odours by over 99%
- Reduces gases, vapours and VOCs by over 80%



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### Tested and Approved by Leading Agencies



Multiple studies have been conducted on RGF PHI Cell technology and they are widely approved for use to control airborne and surface-based bacteria, viruses, smoke and odours.

- Approved by the USDA, FSIS and FDA for use in food processing plants
- US military approved for use in field hospitals
- Chinese government approved for use in controlling the SARS virus
- Testing carried out by:
  - Kansas State University
  - Midwest Research Institute
  - NELAP Accredited Independent Labs - The NELAC Institute
  - California Microbiology Center
  - IBR Laboratories
  - University of Florida
  - United States Air Force
  - R&D Labs
  - University of Cincinnati
  - Kane Regional Hospital
  - FEMA
  - NEI-Chinese Government

## Contact Airius

Airius fans are commonly used to balance temperatures in a wide variety of environments – from care homes to warehouses.

Adding an Airius PureAir Series destratification fan is a simple way to continually clean the air, creating a safer and healthier environment for your residents, colleagues and visitors.

**Contact Airius to learn more >>**