



# Duct Cleaning

The air we breathe is a common vector for the transmission of harmful pathogens. If left uncleaned, air conditioning ducts provide a reservoir for airborne organisms to amass and multiply – posing a risk to human health.

As this contaminated air circulates through hospital buildings it creates a danger to patients - especially those whose compromised immune systems have left them more susceptible to acquiring infection.

## The Risk of Infection

Hospitals are familiar with the risks of HAIs and the costs of MRSA infections. MRSA bacteria and *Aspergillus* spores are commonly found in 'dusty' and inaccessible areas such as air conditioning or extraction ducts. This airborne bacteria can survive on surfaces or skin cells for up to 80 days, as well as being able to potentially travel the length of a ward.

*Pseudomonas aeruginosa* bio-aerosols have also been implicated as a cause of outbreaks from contaminated air-conditioning units.

The government's Mandatory HAI Surveillance on MRSA and *Pseudomonas* infections means it is vital hospitals have a robust cleaning schedule for their air conditioning ducts and extraction systems to reduce the risk of outbreaks of HAIs.



## Did you know...

**1.7m**

NOSOCOMIAL INFECTIONS  
OCCUR EACH YEAR,  
WITH NEARLY 100,000  
ASSOCIATED DEATHS<sup>1</sup>

- Airborne transmission is more prevalent in healthcare settings due to overburdened hospitals and the presence of immunocompromised patients<sup>2</sup>
- MRSA disseminates widely throughout the ward and is commonly found in dusty, inaccessible high surfaces<sup>2</sup>
- MRSA can survive on surfaces or skin scales for up to 80 days and spores of *Clostridium difficile* may last even longer<sup>2</sup>
- Poorly maintained ventilation systems may eventually act as a source of, rather than as a defence against, aerosol/airborne infection<sup>2</sup>

Sources: See overleaf.



## The Most Susceptible

Whether it be in theatres or specialist areas which care for patients whose immune systems are compromised, maintaining air quality is essential in reducing the risk of transmission of infection. When these groups of patients acquire an infection, it is likely to result in a longer hospital stay, impacting the throughput of patients and bed capacity, as well as cost of care.

In theatres, it is essential to provide safe, clean air to reduce the risk of Surgical Site Infections (SSIs). A robust schedule of duct cleaning is therefore especially beneficial to staff and patients in theatres, wards and treatment rooms, as well as specialist areas including ICU, oncology and respiratory clinics.

## How Inivos Can Help

Our duct cleaning can be delivered as both an on-call service for emergency situations, a specific area or a project or as a scheduled managed service contract. Our work is carried out in compliance with all relevant health and safety regulations<sup>2</sup>.

This enables us to reduce the risk of a patient acquiring an infection whilst in hospital, by reducing the number of reservoirs available for dangerous pathogens to multiply in.

## Our Service

We manage the project from end-to-end to ensure all stakeholders are aligned through clear communication of a complete project plan. Our teams of qualified technicians are able to operate 24 hours a day, 365 days a year to ensure rapid turnaround and minimum disturbance or disruption to the clinical schedule. This involves:

### Pre-Cleaning Assessment

Our first step is to survey the ductwork and to take samples to actively assess the current condition and implement the correct cleaning plan. This allows us to analyse the microbial growth and degree of dust contamination.

### Active Cleaning

We then use the correct method to clean the ducts which may include using a rotary brush, in conjunction with an air mover, hand cleaning, air whipping or a process known as 'wanding'.

### Validated Assurance

After cleaning and disinfecting, we validate the efficacy with testing of the dust contamination and microbial growth, before providing you with a report. We also take photographs before, during and after our work to show you the results, in line with our evidence-based approach.

## Our Approach

As experts in understanding the importance of infection prevention and control, we pay particular attention to our methods of work to ensure the process is effective by controlling the risk of cross contamination between areas.

Our knowledge and experience takes care of sealing and isolating ducts sectionally so as to prevent contamination of already serviced partitions.

## Why Inivos?

Not only are we an established and trusted name in healthcare, with facilities and hospitals around the world relying on our advanced hydrogen peroxide vapour and UV-C light disinfection robots, but we also offer a level of expertise second to none, and services not provided by other companies, including call-outs, pre-cleaning assessments and decontamination.



Multiple areas included



Evidence based processes



Validated assurance



Dedicated project management

Helping you provide patient-ready spaces with on-call decontamination and managed services



Our Inivos services are easy to arrange and tailored to your requirements:

Call **0845 270 6690** or email **customerservices@inivos.com**