



THE FACILITY MANAGER'S GUIDE TO SICK BUILDINGS & INDOOR AIR QUALITY

SICK BUILDINGS

DEFINITION: A building in which the environment puts the occupants at risk for upper respiratory infections



1 OUT OF 4 buildings in the US can be classified as **SICK**

64 MILLION WORKERS

frequently experienced two or more symptoms associated with **SICK BUILDING SYNDROME (SBS)** at work including:

- Nose irritation
- Eye irritation
- Headaches



20 PERCENT OF ALL ILLNESSES are either caused by, or aggravated by, **polluted indoor air**

Indoor air pollution ranks as one of the **TOP FIVE environmental risks to public health** since 1990



INDOOR AIR QUALITY (IAQ)

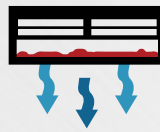
DEFINITION: The temperature, humidity, ventilation and chemical or biological contaminants of the air inside a building



Around the world, a death occurs

EVERY 20 SECONDS due to **poor indoor air quality**

2 OUT OF 3 indoor air quality problems involve **INEFFICIENT HVAC AND AIR DUCT SYSTEMS**



A buildup of **JUST .042 INCHES** of dirt on a heating or cooling coil can result in a **decrease in efficiency of 21 percent**

1 OUT OF 6 people who suffer from allergies do so because of the direct relationship to fungi and bacteria in **AIR DUCT SYSTEMS**



THE COST OF SICK BUILDINGS

IAQ problems cost the **US economy** as much as **\$168 BILLION PER YEAR**

US adults miss about **14 million workdays** per year as a result of **ASTHMA**, an issue commonly triggered by poor IAQ

\$60 BILLION= Estimated **loss in productivity** due to poor indoor air quality

The efficiency of a cooling system with dirty coils can be reduced by **AS MUCH AS 30 PERCENT**

“ *Indoor air pollution is one of our biggest environmental health threats... bigger than toxic waste sites and the destruction of the ozone layer.* ”

—ENVIRONMENTAL PROTECTION AGENCY

THE BENEFITS OF IMPROVING IAQ

- Reducing sick building symptoms through better indoor air quality and **PROPERLY MAINTAINED HVAC SYSTEMS** can lead to **\$10-\$30 billion** in productivity gains
- **1 PERCENT IMPROVED PRODUCTIVITY** would be equivalent to the whole **ENERGY COST** of a building
- **78.56 percent** the **AVERAGE RETURN ON INVESTMENT** of an IAQ improvement program
- A 100,000 square foot building with **400 TONS OF AC** can save **\$22,500 PER YEAR** with a clean HVAC system
- **CLEAN HVAC SYSTEMS** reduce energy costs by over **30 PERCENT**



WHAT'S THE SOLUTION?

How can facility managers protect their buildings and avoid being a sick building statistic?

DOWNLOAD MY FREE COPY OF THE ACR, THE NADCA STANDARD

DOWNLOAD NADCA'S ACR STANDARD AND LEARN:

- ✓ Industry-tested standards and guidelines for the maintenance of HVAC systems
- ✓ Recommended inspection & cleaning schedule for HVAC systems
- ✓ Education on HVAC systems, processes and techniques to protect your building from poor air quality

AND HAVE YOUR **HVAC SYSTEM** CLEANED IN ACCORDANCE WITH **ACR** BY A **NADCA PROFESSIONAL**