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

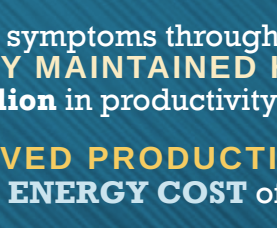
1 OUT OF 4 buildings in the US can be classified as **SICK**

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)

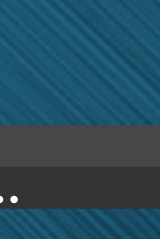
DEFINITION: The temperature, humidity, ventilation and chemical or biological contaminants of the air inside a building

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

Sources: *American College of Allergists, The Environmental Protection Agency, AirAdvice State of Our Indoor Air Report, Total Health and Better Health Magazines, Lawrence Berkley National Laboratory study, The American Lung Association, Indoor Air Quality and Office Property Value study. Department of Energy*