NEMA Healthcare Facilities Workshop

COVID-19 Impact on Healthcare Facility Manager-and-Supplier Relationships

One Suppliers Story of Growth & Evolution

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COVID-19 Impact on Healthcare Facility Manager-and-Supplier Relationships

• Since the early months of this year, healthcare facility management has been faced with a burdening demand for their skills, expertise, and services like never experienced before.

• The advent of the most recent coronavirus disease (the virus SARS-CoV-2 which causes the disease COVID-19) has resulted in illness and death, creating a worldwide pandemic accompanied by widespread disruption, concern, and fear among the general public.

• Facility Managers responsible for the ventilation, filtration, and indoor air-quality of healthcare buildings have been under increased pressure to assure they can meet stringent code requirements while contributing to the complex dynamics of staff-and-patient health, safety and wellbeing.

We provide answers to the following questions:

1. What are the complex issues facing healthcare facility managers since the onset of the COVID-19 pandemic?
2. How are healthcare facility managers prioritizing issues in effort to be efficient and responsive with their actions?
3. What information, solutions, products, or services do healthcare facility managers deem most important during these trying times?
4. How can suppliers anticipate the needs of healthcare facility managers to be more proactive with their services?
5. What are some specific solutions that have helped healthcare facility managers fulfil the pressing need to help keep patients-and-staff both safe and healthy now, as well as into the future?
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David Schurk
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Making Hospitals Healthier & More Energy Efficient
Greater Denver Area · 500+ connections · Contact info
COVID-19 Impact on Healthcare Facility Manager-and-Supplier Relationships

Wholesale Distribution of HVAC Equipment, Controls and Services

- Colorado
- Wyoming
- 180 Employees
- $250M Sales
- Serve all Verticals
- Denver
- Colorado Springs
- Englewood
- Johnstown
COVID-19 Impact on Healthcare Facility Manager-and-Supplier Relationships

Wholesale Distribution of HVAC Equipment, Controls and Services

1. End User
2. Architect Engineer
3. Factory
4. Supplier
5. Installer
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Community transmission of COVID-19 was first detected in the United States in February 2020. By mid-March, all 50 states, the District of Columbia, New York City, and four U.S. territories had reported cases of COVID-19.
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Evolve or Fail
COVID-19 Impact on Healthcare Facility Manager-and-Supplier Relationships

Immediate Initiatives

▪ Hiring Freeze
▪ No Layoffs or Furloughs
▪ Estimated 15% Impact on Yearly Sales Volume
▪ Only Essential Workers on Site
▪ A & B Shift of Inside Support Personnel
▪ All Sales Staff to Work Remotely
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Carrier Opticlean™

Product Highlights and Benefits:
- 99.99% efficiency, surpassing N95/FFP2 ratings
- 210,000+ sq ft of coverage
- HEPA filtration
- Negative air machine
- Minimum 200 CFM
- Automatic door
- Remote monitoring
- Simple installation
- Low-maintenance design
- High efficiency

Carrier Opticlean™ - Negative Air Machine

Additional Product Details:

- Filter Alert/Pressure Indicator
  - Alerts user when it’s time to replace a filter
  - Green light indicates filter replacement is needed
- Remote Monitoring
  - Automatic door
  - Remote monitoring
  - Simple installation

Carrier Opticlean™ - Negative Air Machine

NEMA
National Electrical Manufacturers Association
COVID-19 Impact on Healthcare Facility Manager-and-Supplier Relationships

The HVAC System's Role in Environmental Infection Control for Hospitals
David Schub, DEE, CEM, LEED-AP, CDSM, CTP, SPI, CIQSM, NCCCM, ASHRAE Distinguished Lecturer, HVAC Strategic Account Manager

Can HVAC Air Filters "Catch" the SARS-CoV-2 Virus?

David N. Schub, DEE, CEM, LEED-AP, CDSM, CTP, SPI, CIQSM, NCCCM, ASHRAE Distinguished Lecturer, HVAC Strategic Account Manager

Improving Filtration Removal of Airborne Pathogens
David N. Schub, DEE, CEM, LEED-AP, CDSM, CTP, SPI, CIQSM, NCCCM, ASHRAE Distinguished Lecturer, Healthcare Strategic Account Manager for Carrier West

Protecting Occupants in Non-Healthcare Environments from Airborne Infections

David N. Schub, DEE, CEM, LEED-AP, CDSM, CTP, SPI, CIQSM, NCCCM, ASHRAE Distinguished Lecturer, Healthcare Strategic Account Manager for Carrier West

Vetting Indoor IAQ Technologies In Light of COVID-19

Time to Move Forward

The time has arrived for the public to begin accepting buildings as part of the new normal. Yet, these still remain permanent changes as the probability of transmission through the air is of particular concern. HVAC system strategies and design criteria are needed to ensure that the building environment and procedures are treated as part of the building's overall design and construction. HVAC systems should incorporate measures to reduce exposure to airborne contaminants and prevent cross-contamination of indoor environments with the building environment.

The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Position Document on Airborne Amoeba Guideline HVAC system recommendations for vacant buildings and facilities which are restored to operation and in use, and the impact of the control of these principles on improving the health and safety of the building's occupants.
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The HVAC System’s Role in Environmental Infection Control for Hospitals

- The HVAC System’s Role in Environmental Infection Control for Hospitals

- FIGURE 1: Droplet size distribution. Droplets are classified by diameter (μm). Humans inhale in the same size range. Less than 5 μm can remain suspended for several hours, depending on humidity. 5–10 μm can remain suspended for minutes. 10–50 μm can remain suspended for seconds. Larger droplets (~100 μm) can be carried by the jet stream up to 10 km or more, depending on wind. Aerosols (<10 μm) are suspended for hours and can be transported for miles.

- FIGURE 2: Anatomy of airways and where droplets can end up, depending on their size.

- Studies show that respiratory viruses have the highest viability and infectivity on surfaces and in the air when humidity is below 40%. Conversely, median range RH 40 to 60% inactivates these viruses.

- The HVAC System’s Role in Environmental Infection Control for Hospitals

- Source: COVID-19 Why We Should All Wear Masks. (2020)

- Source: Dr. Hagerndorff, Dr. Taylor: Open Letter to REHVA

- 1 Micron = 1 micrometer = 1000 nanometers

- National Electrical Manufacturers Association
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Presentations made to Owners, Engineers, Architects, GC’s, Contractors
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New Technology - New Product - New Market Segment
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From Zero to 100-MPH in Two Weeks

- Signed Rep Agreement
- Purchased $250k in IAQ Inventory
- Internal Sales Training
- External Sales Training
- Installation Training
- Marketing Materials
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BREATHE EASY

This facility is using

[Logo: GPS
Air Cleaning Technology]

www.GlobalPlasmaSolutions.com

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Wholesale Distribution of HVAC Equipment, Controls and Services

1. End User
2. Architect/Engineer
3. Factory
4. Supplier
5. Installer

Old Model
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Wholesale Distribution of HVAC Equipment, Controls and Services

New Model
Everyone on the Same Page

End User

Supplier

Factory

Installer

Architect

Engineer
COVID-19 Impact on Healthcare Facility Manager-and-Supplier Relationships

Impact to Date

- Ended Hiring Freeze Last Friday (Hiring 5 New Positions)
- No Layoffs or Furloughs
- Zero Impact on Yearly Sales Volume (Up 2% over Plan)
- All Office Workers on Site (Installed IAQ Technology)
- All Sales Staff Working Remotely (More Productive)
- All Sales Meeting on ZOOM
- Sales Expenses are Down, Sales are UP
- Expanded Sales Territory to Include other States
- Purchased Additional $250k IAQ Inventory
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Wholesale Distribution of HVAC Equipment, Controls, and Services

Provider of HVAC System’s Solutions

Evolve or Fail

Our evolution was in direct response to the needs of our customers

(Made the best out of a bad situation)
THANK YOU

Our message of encouragement and gratitude to all doctors, nurses, technicians and health specialists for their bravery and resolute commitment to saving lives.

Carrier

Turn to the experts