



# FOGMIST™ SYSTEMS

# - VS -

# ULTRASONIC NEBULIZER

## SAFETY\*

### FogMist™

- No stagnant water; water comes directly from the source
- Droplets are 7-12 microns; they are non-inhalable

### Ultrasonic Nebulizer

- Has a history of causing death and disease\*
- Stagnant water houses bacteria colonization
- Droplets are 2-3 microns; they are inhalable

\*See back for additional information

## PRODUCT APPEARANCE

### FogMist™

- Fresh appearance
- Adjustable humidity
- Extends shelf-life
- Direction of fog can be adjusted by each individual nozzle
- On/off capability of individual nozzles

### Ultrasonic Nebulizer

- Wilted appearance of produce on lower shelving
- Fog blows away from case with in-store air movement
- Insufficient moisture throughout case
- No ability to adjust the direction of the fog
- No turn on/off of individual nozzles

## EFFICIENCY

### FogMist™

27 Liters/day  
7 Gal/day

- Fog reaches to the bottom of case, hydrating entire display

### Ultrasonic Nebulizer

340 Liters/day  
90 Gal/day

- Fog dissipates before reaching the bottom of case

## EQUIPMENT COST

### FogMist™

Well UNDER \$10,000\*

*\*price depending on length*

### Ultrasonic Nebulizer

Well OVER \$10,000\*

## YEARLY MAINTENANCE

### FogMist™

- About \$2,500
- Replace RO membrane
- Replace water filters

### Ultrasonic Nebulizer

- About \$5,000
- Replace the UV light bulbs
- Replace RO membranes
- Replace filters
- Replace transducers - causes significant down-time
- Complicated controls due to safety concerns

# HEALTH RISKS ASSOCIATED TO ULTRASONIC NEBULIZER

## Legionella

*(Legionnaires Disease)*

Improper operation and maintenance of water disseminating devices or systems increases the potential to harbor, amplify and transmit legionella.

Water systems associated with Legionnaires disease include:

- Domestic hot water distribution systems - the primary source of infections that develop in healthcare settings and a significant source of other sporadic cases.
- Cooling towers and evaporative condensers (*swamp coolers*)
- Spas and whirlpools (*on display or otherwise in use*)
- Humidifiers
- Supermarket reservoir misters
- Respiratory therapy equipment
- Water fountains
- Hot springs (*artificial waterfalls*)
- Dental hygiene equipment
- Cold water systems (ice machines, storage tanks)
- Fire suppression systems

## Bacteria

Ultrasonic humidifiers are prone to spread bacteria if not properly cared for. If the water in the units becomes stagnant, the ultrasonic humidifier cannot distinguish this and will spray the contaminated water into your room.

## Effectiveness Governed by Quality of Maintenance

The main disadvantage of ultrasonic humidifiers is their maintenance cost. In order to eliminate particulate matter in water from being introduced into the atmosphere, ultrasonic units need a demineralization process that requires periodic maintenance or replacement.

## Sources:

“Legionella bacteria are one of the top three causes of non-epidemic, community-acquired pneumonia, and are cited as the indoor building contaminant bacteria most likely to result in mortality.”

- [http://63.111.58.117/library/riskcontrol/legionella\\_risk.html](http://63.111.58.117/library/riskcontrol/legionella_risk.html)

# DEATH AND ILLNESS ASSOCIATED WITH ULTRASONIC NEBULIZER

