



HUMIDIFICATION

SUMMER SCHOOL – WEEK 6

Agenda

Clinical Overview

Product Overview

Competitive Landscape

Selling Strategies

Clinical Overview

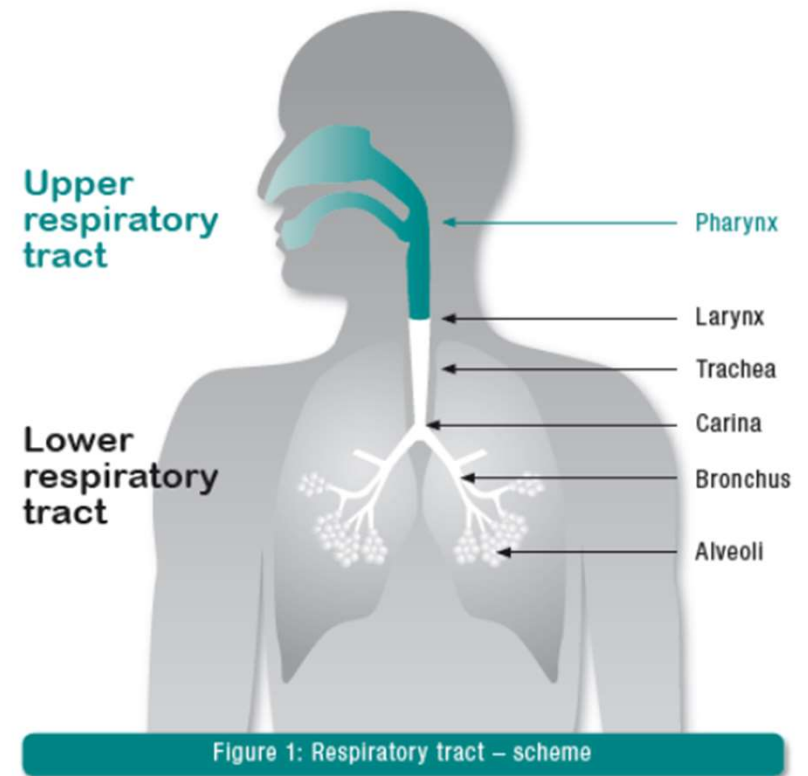
What is humidification?

Humidification is the artificial addition of moisture to inspired gasses, it can be heated (active), non-heated (passive) or cool/cold.

Why do we need humidification?

The upper airway naturally heats and humidifies the air when we breathe in. If the upper airway is bypassed by intubation, or a high flow of gasses are applied (NIV, HFOT) humidification needs to be artificially applied.

Imagine standing outside in freezing temperatures and taking a deep breath in through your nose...did it hurt? We need heat and moisture when we breathe!



Where is Humidification used?

ICU

Emergency Room

PACU

Patient Floors



How Does Humidification Fit in Respiratory Care



Inhalation

Application & Features

- Prevent drying of airways
- Ventilator & HFOT therapy
- Active humidification

Cross-Selling

- Heated circuits/chambers
- NIV masks
- HFOT interfaces



Lg. Volume Nebulizer

Application & Features

- Prevent drying of airways
- Used at 6-12 L/min
- Aerosolizes water/saline

Cross-Selling

- Aerosol masks
- Trach masks
- Corrugated tubing



Bubble Humidifier

Application & Features

- Prevent drying of airways
- Used at 1-6 L/min, typically

Cross-Selling

- Nasal cannula



Modudose & Irrigation

Application & Features

- Cleaning, removing secretions & dilutions
- Suction & med delivery

Cross-Selling

- Open Suction kits
- Verso closed suction
- Nebulizers
- Trach care kits

Full Water Offerings

Material	Material Description	Case Quantity	Type
2D0737	WATER STERILE F/INHALATION 2000ML 6/CS	6	Flex Bag
2D0735X	WATER STERILE F/INHAL FLEX 1000ML 14/CS	14	Flex Bag
CHB0010	WATER STERILE IN HANGING BOTTLE 1000mL	12	Hanging Bottle
CHB0020	WATER STERILE IN HANGING BOTTLE 2000mL	8	Hanging Bottle
002620	HUMIDIFIER KIT 500ML 12/CS	12	Bubble Humidifier
AL4109	SALINE 0.9% DUALTOP PLAST BT 110ML 25/CS	25	Irrigation Saline
CK0010	NEB KIT W ADAPTER STERILE WATER 1000mL	12	Large Volume Nebulizer
CK0005	NEB KIT W ADAPTER STERILE WATER 500mL	12	Large Volume Nebulizer
CK4510	NEB KIT W ADAPTER 0.45% NaCl 1000mL	12	Large Volume Nebulizer
CK4505	NEB KIT W ADAPTER 0.45% NaCl 500mL	12	Large Volume Nebulizer
CN4510	SODIUM CHLORIDE SOLUTION 0.45% 1000mL	12	Replacement Saline
CN4505	SODIUM CHLORIDE SOLUTION 0.45% 500mL	18	Replacement Saline
CN0005	WATER STERILE FOR INHALATION 500mL	18	Replacement water
CN0010	WATER STERILE FOR INHALATION 1000mL	12	Replacement water
5257	SALINE 5ML MODUDOSE 1000/CS	1000	Unit Dose
5251	SALINE 3ML MODUDOSE 1000/CS	1000	Unit Dose
5262	SALINE 15ML 0.9% NACI RED MODUDOSE 144CS	144	Unit Dose
AL7025	WATER STERILE UNIT DOSE 5ML 1000/CS	1000	Unit Dose
AL7023	WATER STERILE UNIT DOSE 3ML 1000/CS	1000	Unit Dose



Cool Humidification

Pre-filled Bubble Humidifier

- Bubble humidifiers are filled with sterile water and are used on general patient floors
- Adds humidity for patient comfort. Dry gasses can cause nasal irritation and/or bleeding
- Used with a nasal cannula
- Gas flow ranges from 1-6LPM
- Cannot be refilled
- Sometimes referred to as a bubbler
- **Product code: 002620**

Cross Sell: Nasal Cannulas



Competition – Bubble Humidifiers

Medline Hudson RCI - AquaPak

- 340mL
- 540mL
- 650mL

McKesson Bubble Humidifier

- 350mL

Amsino – Amsure

- 350mL
- 550mL



Pre-filled Large Volume Nebulizers

Large Volume Nebulizer

- AKA Aerosol bottle
- Kit includes adapter and bottle of:
 - Water or
 - Saline
- Used with an aerosol mask, trach mask, or blow by (no interface)

Product codes: CK0005, CK0010, CK4505, CK4510

Replacement water

- Used to fill humidifiers (not prefilled) and nebulizers
- CN0010 (1L) not for sale
- Cannot be spiked

Product code: CN0005

Cross Sell: Corrugated tubing, Aerosol and Trach Masks



Competition - Pre-filled Large Volume Nebulizers

Large Volume Nebulizer

- Medline Hudson RCI – AquaPak
- Multiple configurations of water and saline
- Can buy adapter separate



Replacement Water

- Amsino
 - 350mL
 - 500mL
 - 1000mL



Irrigation Solution

Irrigation solution

- 0.9% saline
- Dual top:
 - Twist off spout
 - Screw off cap
- 110mL
- Used during trach care

Product Code: AL4109

Cross Sell: Trach care kits



Modudose Unit Dose Solutions

- Used for suctioning and medication delivery
- Sterile water and sterile saline options
- 3mL, 5mL and 15mL options

Product Codes: 5257, 5251, 5262, AL7025, AL7023

Cross Sell: Open suction kits, Closed suction and Medication delivery



Competition

Medline Hudson RCI

- Sterile water
- 0.45% Saline
- 0.9% Saline



Amsino (formally Smiths)

- Sterile Water
- 0.9% Saline





Active Humidification

Flex bags and hanging bottles

- Sterile Water contained in either a flexible bag or rigid spikable bottle
 - 1L and 2L options
- Used for active humidification on:
 - Invasive Ventilator
 - Non-Invasive ventilator
 - High Flow Oxygen Therapy
- Not compatible with Neptune Concha system
- Hanging bottles used with Vapotherm need an adapter (supplied by Vapotherm)



--- Flexible Bag

Product Codes: 2D0735X, 2D0737, CHB0010, CHB0020

Cross Sell: AH Circuits, filters, HFNC, NIV Masks

Hanging Bottle ---



Competition

Sensimedical

- Flex bags only

Amsino

- Bottles only

Medline

- Private label from Amsino for hanging bottles
- Neptune Heater/Concha system
 - Bottles are proprietary
 - Two spikes

Irrigation Water – used for inhalation

- Baxter
- Hospira
- B Braun



Devices that use Active Humidification



High Flow
Oxygen Devices

Non-Invasive
Ventilators

Invasive
Ventilators



Active Humidification Circuits

AH Circuits and Chambers

- Active humidification circuits and chambers are used with invasive ventilators, non-invasive ventilators, and heated high flow systems.
- AH circuits contain a heated wire that helps to warm and humidify the gasses during inhalation/exhalation.
- Compatible with the MR850 heater by Fisher and Paykel



Cat. no.	Description	Qty.
Circuit without chamber		
AH102	Single-limb heated circuit for adults, 5'	10/cs
AH180	Dual-limb heated circuit for adults, 5'	10/cs
Circuit with chamber		
AH202	Single-limb heated circuit with chamber for adults, 5'	10/cs
AH280	Dual-limb heated circuit with chamber for adults, 5'	10/cs
Cat. no.	Description	Qty.
Circuit without chamber		
AH032	Infant single-limb, heated 4' continuous flow circuit (> 4 L/min), pressure line, dry gas line and adapters	10/cs
AH165	Infant dual-limb, dual-heated, 4' high flow circuit (> 4 L/min), pressure line, dry gas line and adapters	10/cs
AH132	Infant single-limb, heated 4' continuous flow circuit with chamber (> 4 L/min), pressure line, dry gas line and adapters	10/cs
AH265	Infant dual-limb, dual-heated, 4' high flow circuit with chamber (> 4 L/min), pressure line, dry gas line and adapters	10/cs
Cat. no.	Description	Qty.
AH290	Humidification chamber, automatic fill	10/cs

Competition

Fisher and Paykel

- Market leader
- Committed use agreements
 - Buy our consumables and get free heaters (MR850)
- Evaqua Circuits (pictured)
 - Special material that wicks away moisture
 - “reduces” rainout (condensation in circuit)





Full Humidification Competitive Matrix

Competitive Matrix

	AirLife	Medline	Sensimedical	Amsino	Cardinal & McKesson	Avanos
Inhalation	Yes Flexbags & Bottles	Yes	Yes 500mL and 1L flex bags	Yes 500mL, 750mL and 1L bottles	No	No
Large Volume Nebbs	Yes Water & Saline 500mL & 1L	Yes Water & Saline 440, 760, 1070 mL	No	Yes Water 500mL – 1L	No	No
Bubble Humidifiers	Yes 500mL	Yes 340, 540, 650 mL	No	Yes 350, 550 mL	No	No
Irrigation	Yes 110mL	Yes Cups & Bottles 100mL – 1L	No	Yes 100mL	Yes Cups & Bottles 100mL – 1L	No
Modudose (Unit Dose)	Yes Water & Saline 3, 5, 15 mL	Yes Water & Saline 3, 5, 15 mL	No	Yes Water & Saline 3, 5, 15 mL	No	Yes Saline 5, 15 mL

Thank you



www.myAirLife.com