



A Member of  SOLUTIONHEALTH

Respiratory Medications

“I BREATHE IN MY COURAGE AND
EXHALE MY FEAR”

Two Names ???



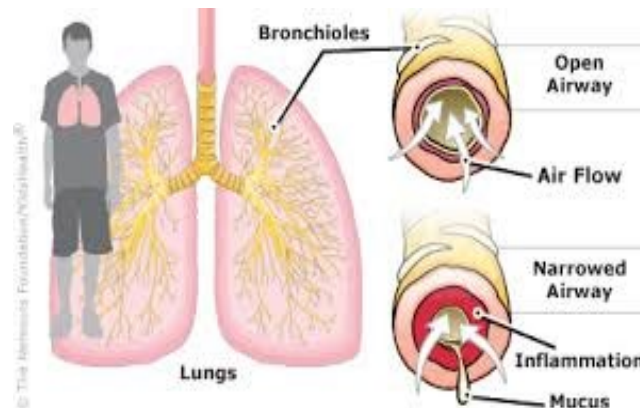
- ❑ Every medication has two names- **GENERIC** and **BRAND**
- ❑ **Generic** name- is the scientific name which describes the main chemical in the drug.
- ❑ **Brand** name- is the name that the specific company uses when it makes that drug.
- ❑ Example-Acetaminophen-a common headache medicine. Brand names include Anacin Aspirin Free and Tylenol.

Classes of Pulmonary Medications

- Bronchodilators (Short and Long Acting **OR** Adrenergic and Anticholinergic)
- Corticosteroids- “Steroids”
- Combination Medication
- Mucolytics
- Allergy medications
- Antibiotics

Bronchodilators

- ❑ Preferred delivery method--**INHALERS**--but can be taken as pills, liquids or nebulized liquids
 - MDI**-Metered Dose Inhaler (aerosol)
 - DPI**-Dry Powder Inhaler (powder)
 - Nebulizer**-changes medication from a liquid to a mist
 - SMI**-Soft Mist Inhaler (Respimat)
- ❑ Relaxes tight muscles in the airways which open the airways, relieves cough & mucus production
- ❑ Side Effects may include increase heart rate, headache and shakiness-tremors



Short-Acting Bronchodilators

- ❑ Provide quick relief--therefore fast-acting--within 15-20 min
- ❑ Last 2-6 hours
- ❑ Known as a “Rescue Inhaler”
- ❑ Used on a “as needed” basis
- ❑ Using your “Rescue” inhaler before activities &/or triggers that make your breathing worse, may help lessen or prevent increased shortness of breath
- ❑ Increased use of rescue inhalers may indicate COPD/Lung Disease is not well controlled



Short-Acting Bronchodilators (SABA)

- Atrovent (ipratropium bromide) MDI or Nebulizer
- Combivent Respimat (albuterol and atrovent) SMI
- DuoNeb Nebulizer (Liquid form of Combivent)
- Proair, Proventil, Ventolin (all albuterol) MDI or RespiClik
- Airsupra (albuterol & budesonide-ICS) MDI
- Xopenex (levalbuterol) MDI or Nebulizer

Long-Acting Bronchodilators (LABA)

- DOES NOT provide quick relief-do not take for an “attack”.
- Last 12-24 hours
- Usually referred as “Maintenance” or “Controller” Inhalers.
- Used on a **regular scheduled** basis-not “as needed”

Long-Acting Bronchodilators (LABA or LAMA)

- Serevant (salmeterol xinafoate)-MDI or DPI
- Perforomist (formoterol)-Nebulizer
- Brovana (Aformoterol)-Nebulizer
- Spiriva HandiHaler-DPI or Respimat SMI
(tiotropium)--Avoid getting powder in eyes
- Striverdi Respimat-SMI (olodaterol
hydrochloride)
- Incruse Ellipta-DPI (unmeclidinium)
- Tudorza Pressair-DPI (aclidinium bromide)

Corticosteroids

- ❑ Corticosteroids are man-made drugs that closely resemble cortisol, a hormone that your adrenal glands produce naturally
- ❑ Corticosteroids are often referred to by the shortened name "steroids." Steroids can be given in pill form or I.V.
- ❑ Like all steroids these are given with the hope of reducing the inflammation that occurs in the airways
- ❑ Gargling & rinse mouth out with water (**do not swallow water**) to help prevent hoarseness, throat irritation and infection (thrush)
- ❑ Not to be used for an asthmatic attack
- ❑ **Always** take bronchodilator first

Possible Side Effects of Steroids

- Increased appetite, weight gain
- Sudden mood swings
- Muscle weakness
- Blurred vision
- Increased growth of body hair
- Easy bruising
- Swollen, “puffy face”
- Acne
- Worsening diabetes
- High blood pressure
- Nervousness, restlessness
- Stomach irritations
- Water retention, swelling
- Cataracts or glaucoma
- Osteoporosis (bone weakening disease)

NOTE- Frequency of side effects may vary from patient to patient.
-Not all patients develop side effects.

Inhaled Corticosteroids (ICS)

- Alvesco (ciclesonide) MDI
- Arnuity Ellipta (fluticasone furoate) DPI
- Asmanex (mometasone) MDI
- Flovent (fluticasone propionate) Diskus or MDI
- Pulmicort (Budesonide) DPI or nebulizer
- QVAR (beclomethasone) MDI

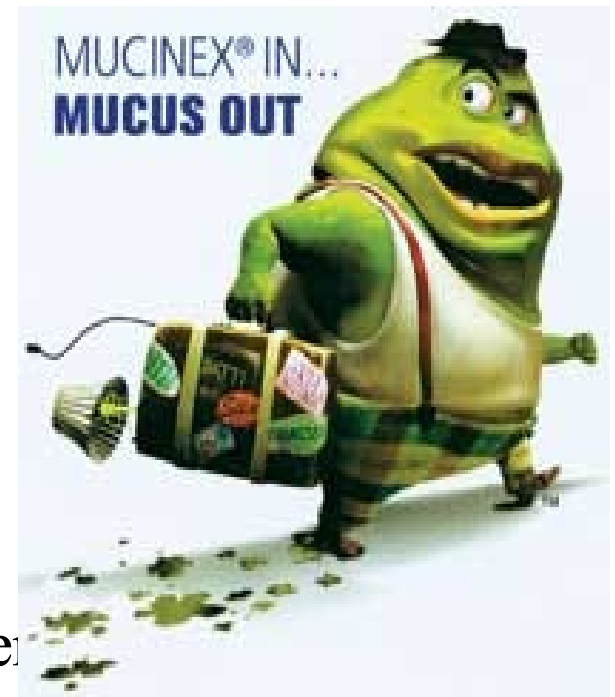
Combination Medication

2 + Medications combined into one inhaler

- ❑ Include LABA & ICS such as Advair Diskus, Breo Ellipta, Dulera and Symbicort.
- ❑ Triple therapy inhalers such as Trelegy Ellipta & Breztri Aerosphere has ICS with 2 different types of bronchodilators
- ❑ A short acting maintenance & rescue inhaler (SABA) such as Combivent
- ❑ A short acting rescue (albuterol) & ICS-Airspura
- ❑ An inhaler that contains 2 different types of bronchodilators such as Anoro Ellipta, Stiolto Respimat & Bevespi Aerosphere

Mucolytics

- Muco (coming from mucous)
- Lytic (meaning to eat or dissolve)
- Mucinex and Mucomyst
- These medications help to break the bonds in mucous that make it so thick, and therefore you can cough it up easier
- Make sure to note the color for the doctor!



Allergy Medications

- ❑ Mast cells are part of your body's defense system
- ❑ When allergens come in contact with mast cells, the mast cells dissolve/rupture and release a number of chemicals including histamines
- ❑ Histamines-cause swelling and increased mucus production
- ❑ Goals of Allergy medication are to block histamine release from mast cells that cause allergic reaction. These meds help stabilize mast cells and are used to prevent asthma attacks & symptoms of seasonal or chronic allergic rhinitis

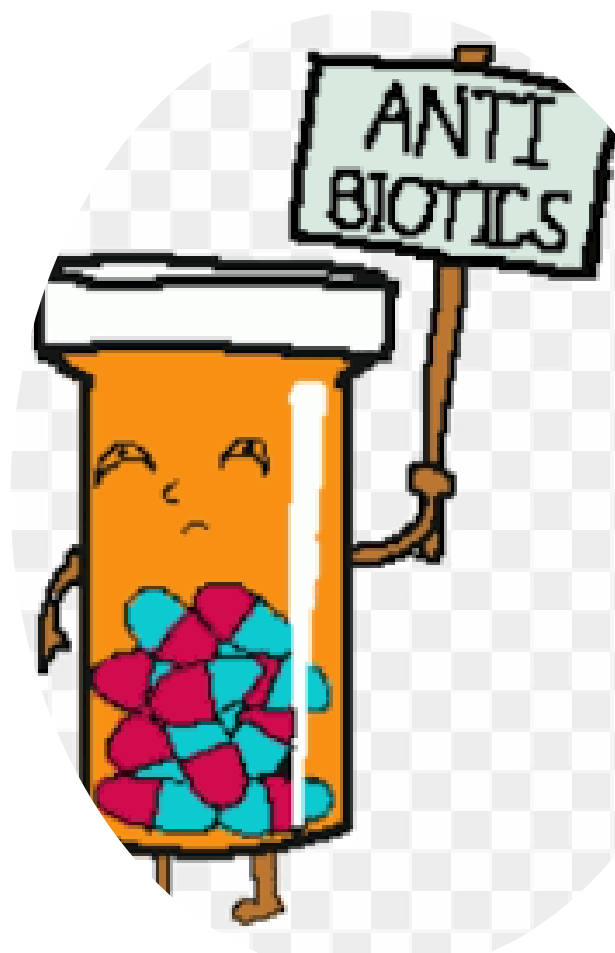
Antihistamines

- Zyrtec (certirizine)
- Claritin (loratadine)
- Allegra (fexofenadine)
- Astelin (azelastine)
- Chlor-Trimeton (chlorpheniramine)
- Benadryl (diphenhydramine)
- Atarax (hydroxyzine hydrochloride)
- Clarinex (desloratadine)
- Dimetapp (bromphreniramine)



Antibiotics

- ❑ Antibiotics are used to treat infections caused by BACTERIA
- ❑ It's IMPORTANT to take all your antibiotics and medications as prescribed
- ❑ If antibiotic is not taken as directed-- bacteria may become weaken, but not destroyed
- ❑ Call your doctor at the first signs of infection



Valve Holding Chambers (VHC) aka Spacers

- ❑ Spacers/VHC are crucial!
- ❑ They increase the deposition of the medication
- ❑ Makes the MDI easier to use
- ❑ Strongly recommended to use a spacer/VHC with an ICS MDI
- ❑ Should NEVER be used for DPI's (Dry Powder Inhalers)



Proper MDI Technique

1. Shake the MDI for at least 5-10 sec. **Remember to PRIME.** Prime rates differ, please check manufacturers specifications
2. Attach the spacer to the inhaler with the canister in a upright position then shake several times
3. Exhale to the end of your normal breath-**not** into the spacer.
4. Actuate it (squeeze it while it's in a spacer)
5. Take a slow steady deep breath in. This should take 3-4 seconds. If the spacer makes a “whistling” sound, you are breathing in too fast. You should **NOT** hear a “whistle”
6. **HOLD** it for 5 -10 seconds, take spacer out of your mouth. Breathe out slowly thru nose or lips.
7. Inhalers that require 2 puffs, wait at least 30 sec-1 minute between puffs.
8. Replace the cap on the mouthpiece of the MDI & spacer after you have finished

FYI

- ❑ Don't use nebulizers, or MDI's near a flame or heat source
- ❑ Don't start new over the counter drugs without talking to MD
- ❑ Cleaning your nebulizer, MDI or spacers weekly. Never wash in soap with lotion ie Palmolive
- ❑ Do not use antibacterial soap or white liquid soap, like ivory
- ❑ *Simple disinfectant*-3 parts water to 1 part vinegar-soak for 30 min, rinse well and air dry
- ❑ Cleaning & Disinfecting are 2 different procedures! **Refer to Self Protection PowerPoint for Disinfecting procedure.**