

ASTHMA APPS

&

VIDEOS FOR CHILDREN

Lisa de Ybarrondo, MD

McGovern Medical School

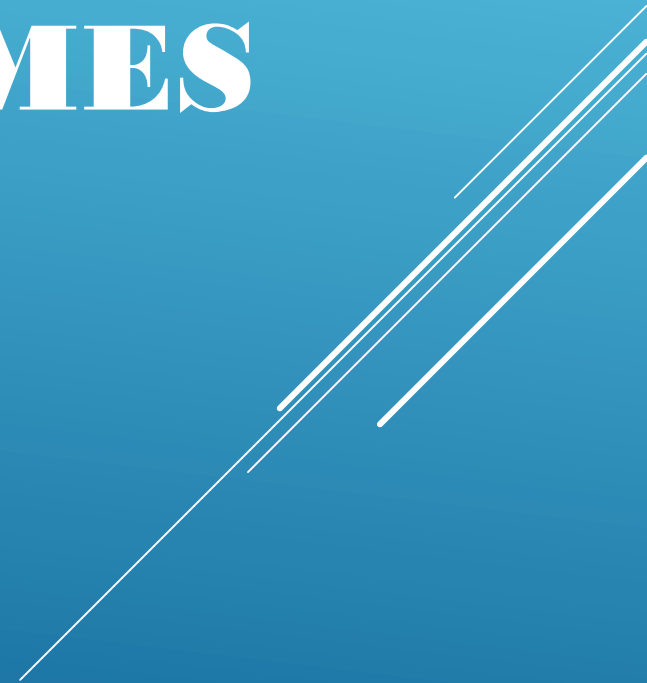
The University of Texas Health Science Center at Houston

APPS AND VIDEOS THAT MAKE ASTHMA MANAGEMENT EASIER

Learning Objectives:

- **To learn about Asthma Apps that can record and track your patient's symptoms, triggers, teach inhaler technique and much more.**
- **To learn how Apps can enhance managing asthma for the patient, family and provider.**
- **To learn about Asthma Apps that can be educational tools through games**
- **What videos are available for asthma education depending on age of the child**
- **What videos demonstrate proper inhaler use with a spacer +/- face mask, washing the spacer and priming the inhaler**
- **What videos are available in Spanish**

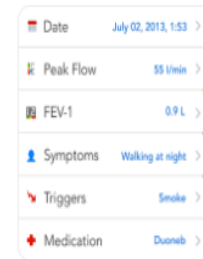
ASTHMA APPS & GAMES



ASTHMA MD

- Compatible with the AsthmaMD peak flow meter
- Tracks medications, asthma triggers, and asthma action plan.
- Charts asthma activity onto a colorful, easy-to-read graph.
- Asthma diary and graph can be shared with the doctor and added to medical records
- Useful for older children if using peak flow meter
- Drawbacks: common rescue meds and controller meds need to be custom added.

Why AsthmaMD?



Log on the Go

Easily log your asthma attacks wherever you go. Customize triggers and medications for quicker entry.

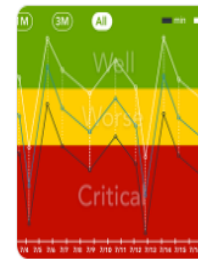
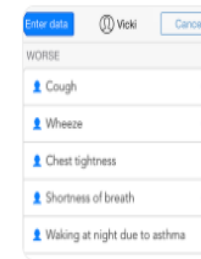


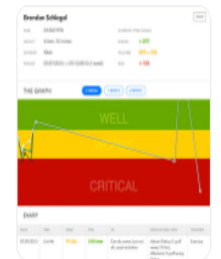
Chart Severity

At-a-glance, graphical view of your PFM and severity.



Benefit Asthma Research

Anonymous, aggregate data will help correlate asthma with environmental factors, triggers and climate change.




Send to Physician

One-step process to send your asthma log and peak flow chart to your physician.

ASTHMATRACK

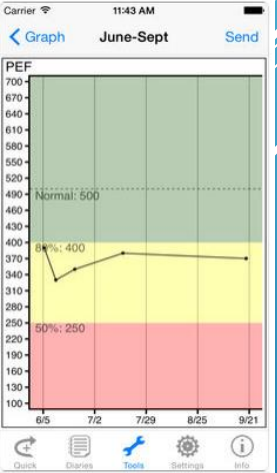
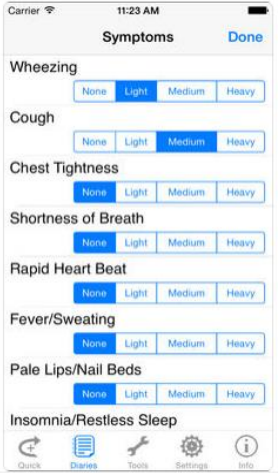
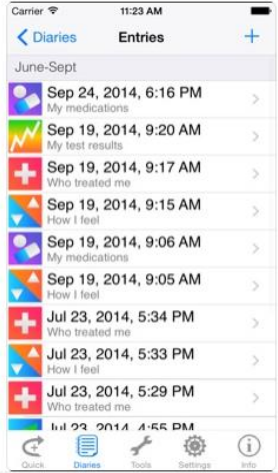
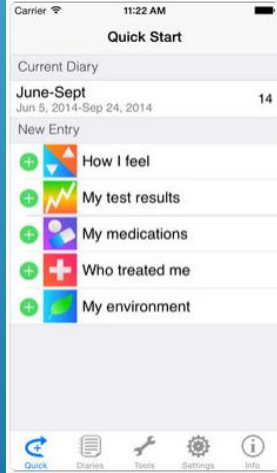
- Part asthma diary, part information collector
- Log asthma symptoms and medication doses
- Creates graphs of asthma activity that can be emailed directly to the doctor.
- Customizable: e.g. if multiple family members have asthma, it allows multiple profiles to be created and track all the information within the one app.
- Useful for older children if using peak flow meter
- Drawbacks: Costs \$1.99
- There is no asthma action plan

This app is only available on the App Store for iOS devices.



asthmaTrack 12+
dangerDown LLC
\$1.99

Screenshots [iPhone](#) [iPad](#)



Date	PEF Value
6/5	350
7/2	380
7/29	370
8/25	360
9/21	350

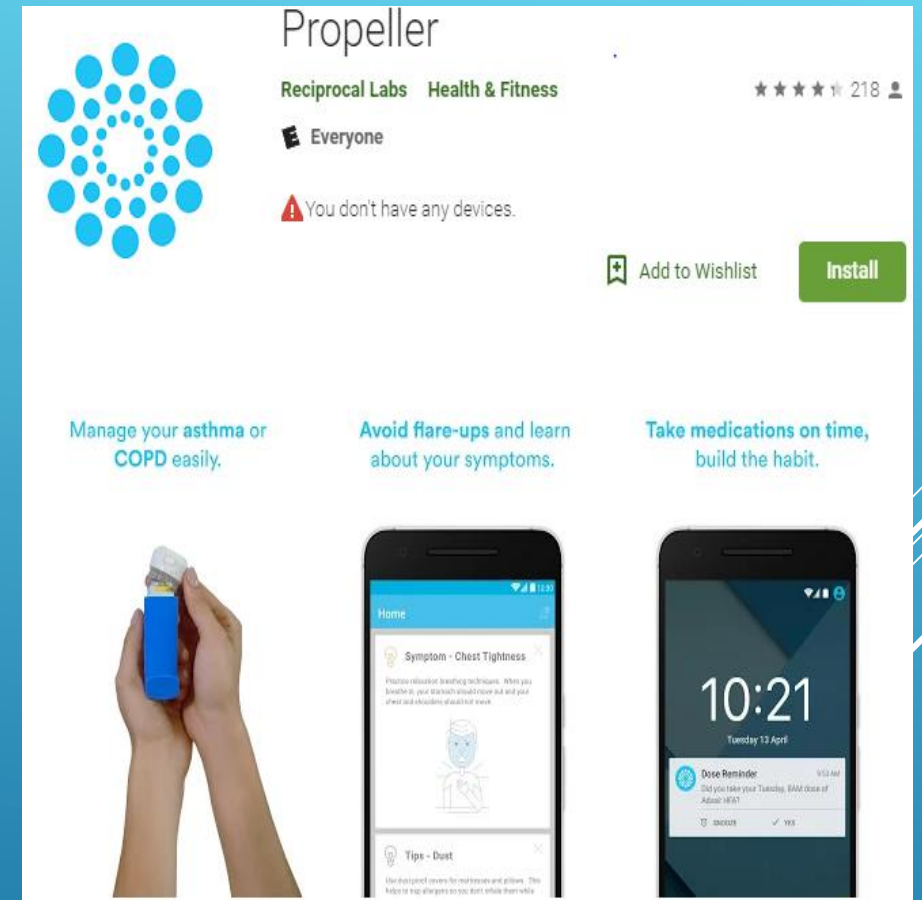
AAP ASTHMA TRACKER FOR ADOLESCENTS

- Developed by @Point of Care, re-branded by the American Academy of Pediatrics (AAP).
- The @Point of Care version is called Asthma Manager.
- Integrates patient-reported health data to foster greater patient adherence and learning, provides patient-specific clinical decision support.
- Both versions of the app contain a journal tool to track symptoms and spirometry.
- Both versions contain a patient education section, with the Asthma Manager version linking directly to the American Lung Association website.
- AAP version is pre-populated with pediatric relevant educational content, instructions and videos.
- AAP version has a My Action Plan section where users can create a personalized asthma action plan with their provider's help with action steps based on their daily peak flow readings.
- Downside: Could not register into AAP version (glitch in system?)



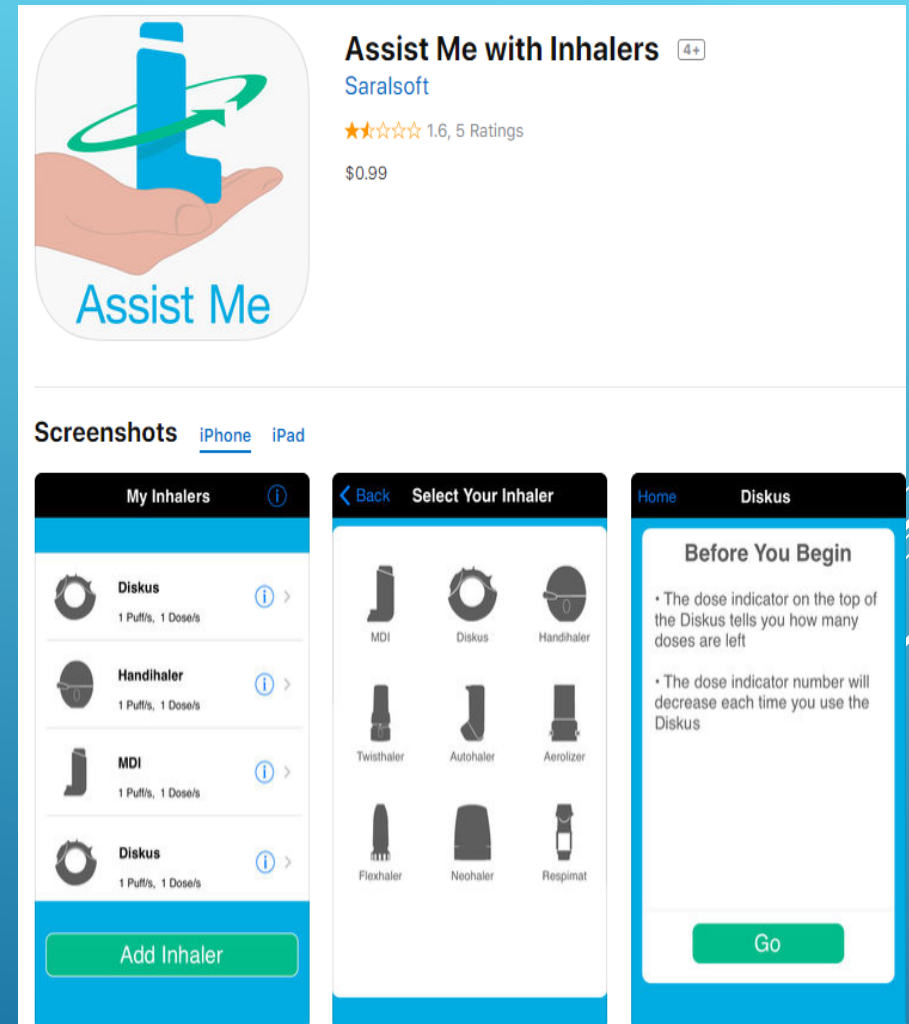
PROPELLER

- Propeller is FDA-cleared technology that works with existing asthma inhalers to help people understand their symptoms and gain control.
- Small sensors clip onto current inhalers. The sensors determine when inhalers are used and sends this information to the Propeller app.
- Generates personalized insights and reminders
- Identifies triggers and tracks symptoms
- Customizes a schedule for controller medications
- Rates asthma control over the last month with the Asthma Control Test (ACT).
- Checks Daily Asthma Forecast including pollutant, humidity and temperature details.
- Inhaler use, triggers, symptoms and progress can be shared with family and doctor.
- Drawback: requires an access code provided by Express Scripts to enroll and receive inhaler sensors



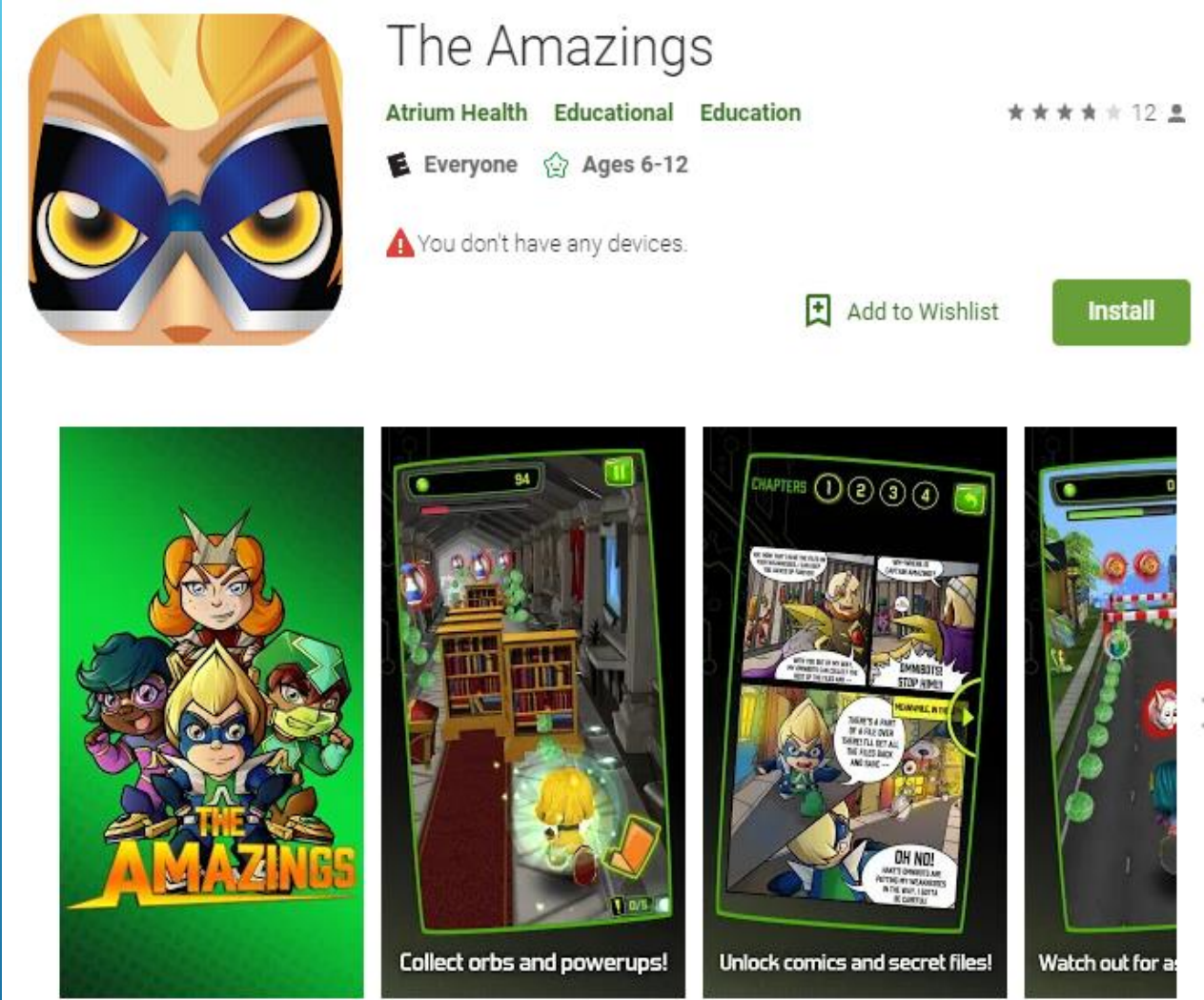
ASSIST ME WITH INHALERS

- ▶ Provides pictures of asthma medications and directions in both English and Spanish on how (and when) to take them.
- ▶ Can set a reminder to take the medications
- ▶ Step-by-step instructions for each inhaler to help deliver the medication properly.
- ▶ Can choose to use the MDI with or without a spacer
- ▶ Drawback: Can only add scheduled controller medications and there is no asthma action plan.
- ▶ Costs \$ 0.99



THE AMAZINGS

- The Amazings features fast-paced, runner-style gameplay to help kids recognize and avoid asthma triggers like pollen, cigarette smoke and pollution, and stay vigilant about their health.
- The intended audience is children with asthma aged seven to 12 years old.
- Gameplay quite simple, fun and addictive!



The Amazings
Atrium Health Educational Education ★★★★★ 12
Everyone Ages 6-12
You don't have any devices.
Add to Wishlist Install

Collect orbs and powerups!

Unlock comics and secret files!

Watch out for as

7 KEYS TO MANAGE CHILDHOOD ASTHMA

- Helps parents manage their child's asthma by providing education about important aspects of asthma care including allergen avoidance, lifestyle modification, symptom relief, controller medications, action plan and response monitoring.
- Videos of cartoon characters demonstrating the proper medication administration technique for different devices.
- Tracking features to maintain a detailed medical record.
- Downside: costs \$2.99

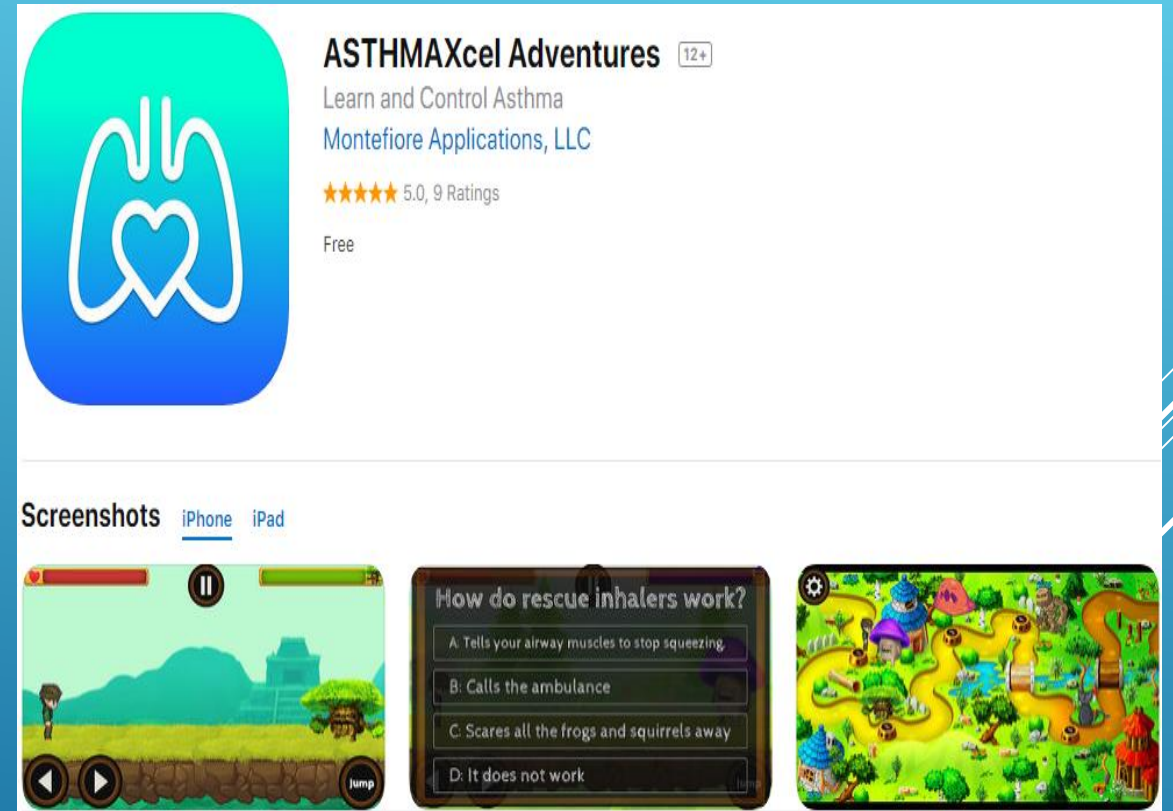
The image displays the Google Play Store listing for the app "7 keys to manage Child Asthma" by Chainsys Health & Fitness. The app is rated 1 star and is available for everyone. It offers in-app purchases, but a warning indicates that the user does not have any devices. The "Install" button is visible.

Below the store listing are four screenshots of the app's interface:

- Home:** Shows the title "7 keys to manage childhood asthma" and a grid of seven categories: Avoid Allergens, Relieve Symptoms, Difficult to Control, Action Plan, Control with Controllers, Modify Lifestyle, and Monitor Response.
- Avoid Allergens:** Lists allergens that trigger wheezing in children, including House Dust Mites, Cockroaches, Fungus, Smoke, Pets, Indoor Air, Outdoor Air, and Desensitization.
- Devices:** Illustrates the correct use of different inhalation devices: MDI with Spacer and Mask, MDI with Spacer, Dry powder inhaler, and Nebulizer.
- Modify:** Shows a section on sleep, including a table of recommended sleep durations for different age groups and a section on snoring.

ASTHMAXCEL ADVENTURES

- Increases asthma knowledge and improves asthma control through several chapters and fun, animated videos and games.
- Teaches some of the triggers that make asthma worse, environmental control, key asthma facts and how to manage asthma.
- Animated videos demonstrate how to prime an inhaler, how to use with a spacer, reviews the pathophysiology of asthma, controller & rescue inhalers
- Children playing the games answer questions during the games to advance.
- Very engaging, fun and informative (and free)! One of my favorites for younger school aged.



ASTHMA ACTION HERO

- Mobile asthma action plan that helps patients manage asthma conditions through notifications.
- Guides physicians and families through the set up of a daily interactive plan including a detailed overview of how to identify moderate to severe symptoms of an asthma attack.
- Alerts users through pop up reminders of the actions to take at varying levels of symptom severity.
- Tracks severity of symptoms and progress. Can email progress to PCP.
- Very easy to use and understand



**VIDEOS:
ASTHMA PATHOPHYSIOLOGY
AND GENERAL EDUCATION**





ASTHMA - IT'S NOT MONKEY BUSINESS!

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=BEBS2-M4KX0](https://www.youtube.com/watch?v=BEBS2-M4KX0)

CUTE VIDEO WITH BASIC ASTHMA EDUCATION FOR YOUNG CHILDREN (PRE-K/ EARLY ELEMENTARY SCHOOL). CHILDREN HAVE AN AUSTRALIAN ACCENT WITH A FEW WORDS MORE DIFFICULT TO UNDERSTAND.



Factores desencadenantes



Humo



Polen



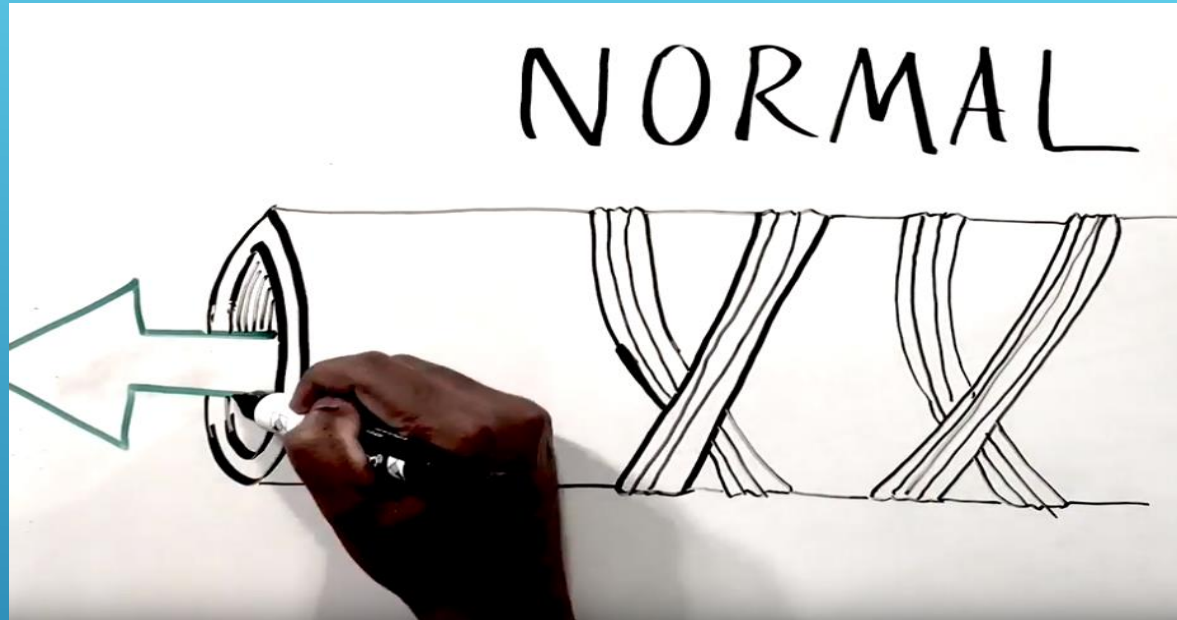
Clima

UCSF

PEDI UCSF PEDIATRIC PULMONARY ASTHMA TEACHING SPANISH 1 INTRODUCCIÓN

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=LRUOUV39M9G](https://www.youtube.com/watch?v=LRUOUV39M9G)

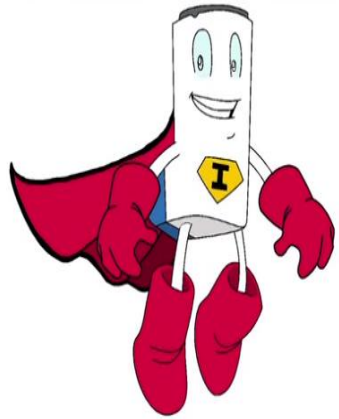
GOOD TEACHING TOOL FOR SPANISH SPEAKING CHILDREN AND PARENTS



ASTHMA VIDEO SPANISH

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=QZZACXEXSEM&T=23S](https://www.youtube.com/watch?v=QZZACXEXSEM&t=23s)

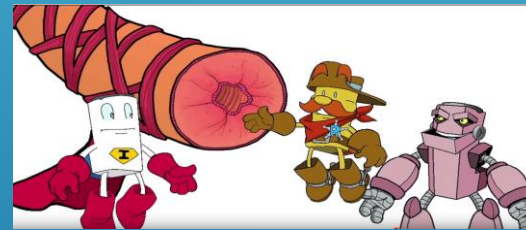
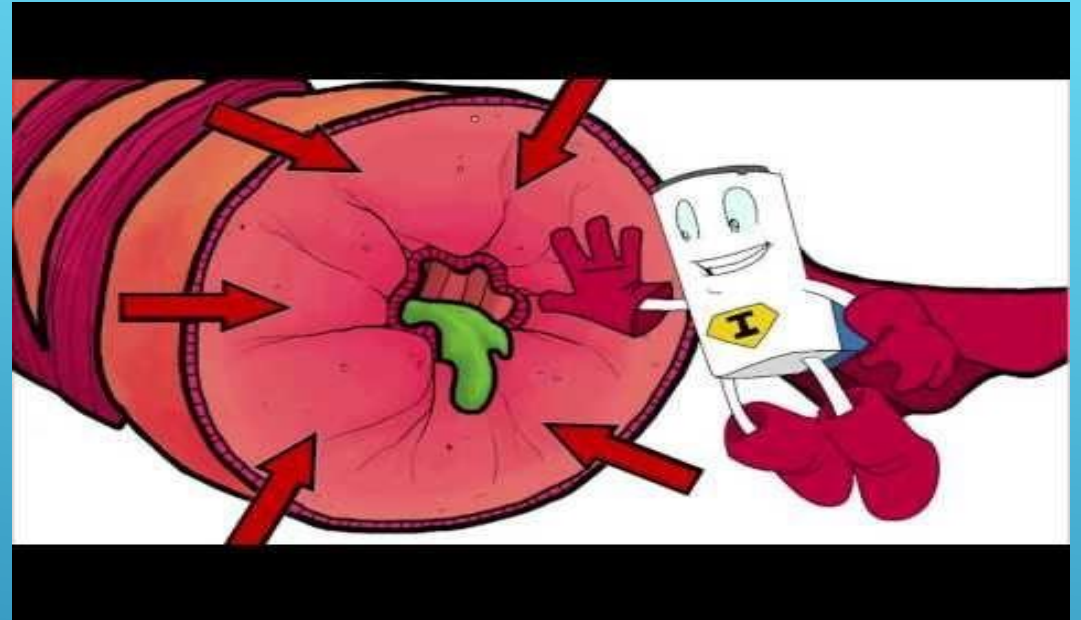
SIMPLE AND EASY TO UNDERSTAND ASTHMA
PATHOPHYSIOLOGY AND RESCUE VS CONTROLLER INHALERS



IGGY AND THE INHALERS

Iggy and The Inhalers is for informational purposes only.
The content is not intended to replace professional medical advice.

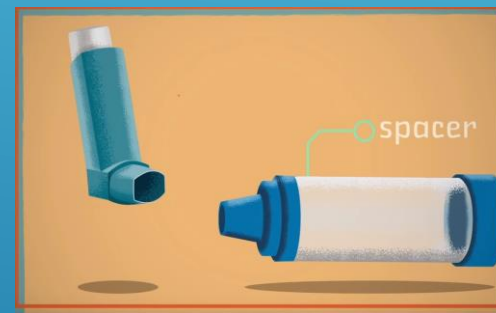
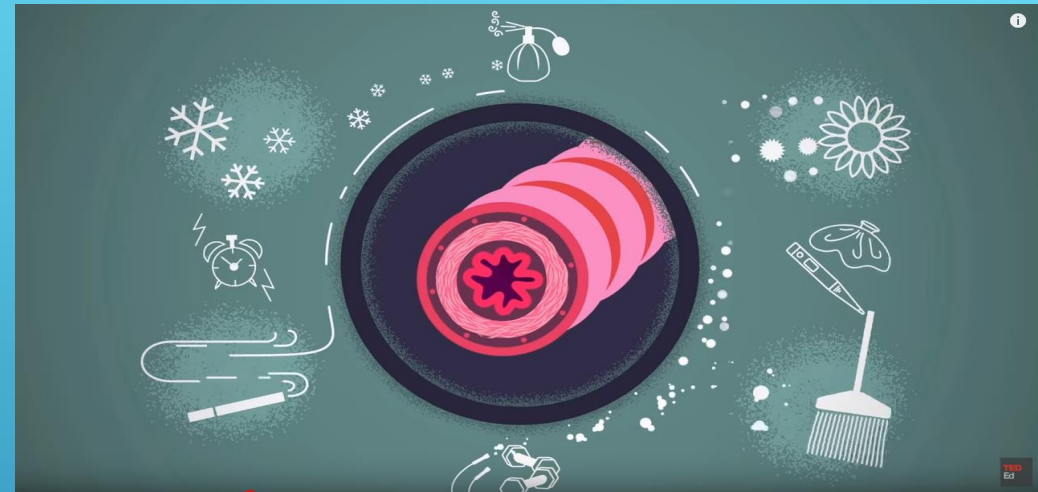
©2013 Alex Thomas and Gary Ashwal



WHAT IS ASTHMA? - FOR KIDS WITH ASTHMA

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=ET_ALSGHEL8](https://www.youtube.com/watch?v=ET_ALSGHEL8)

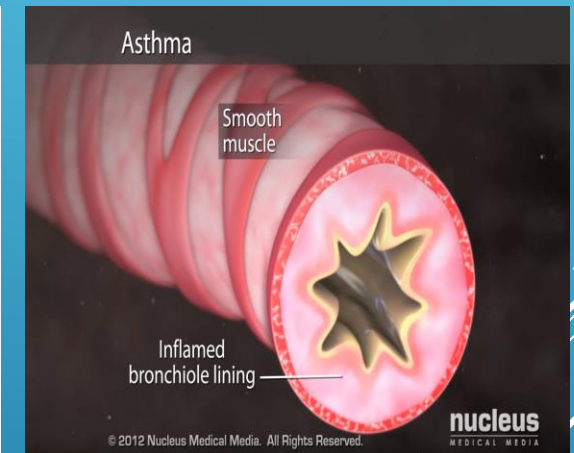
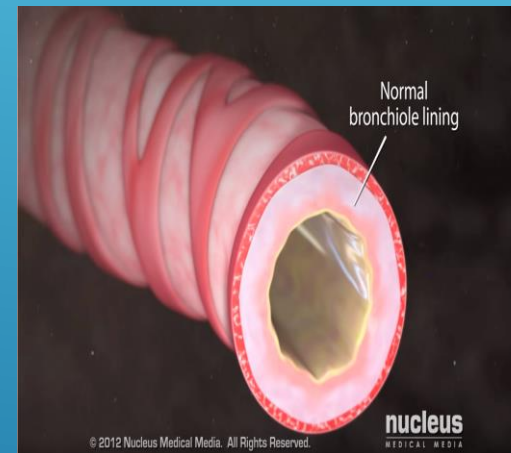
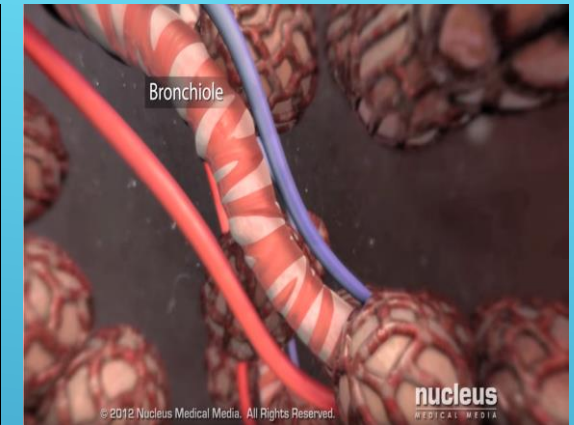
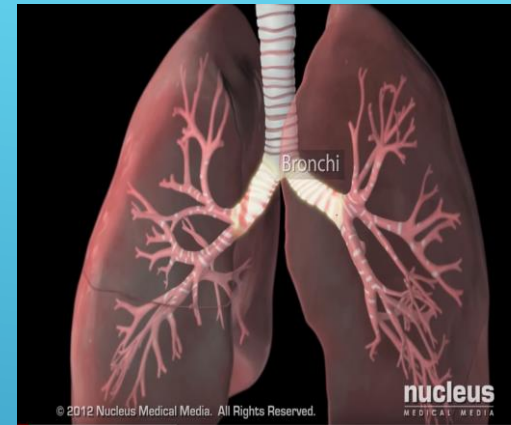
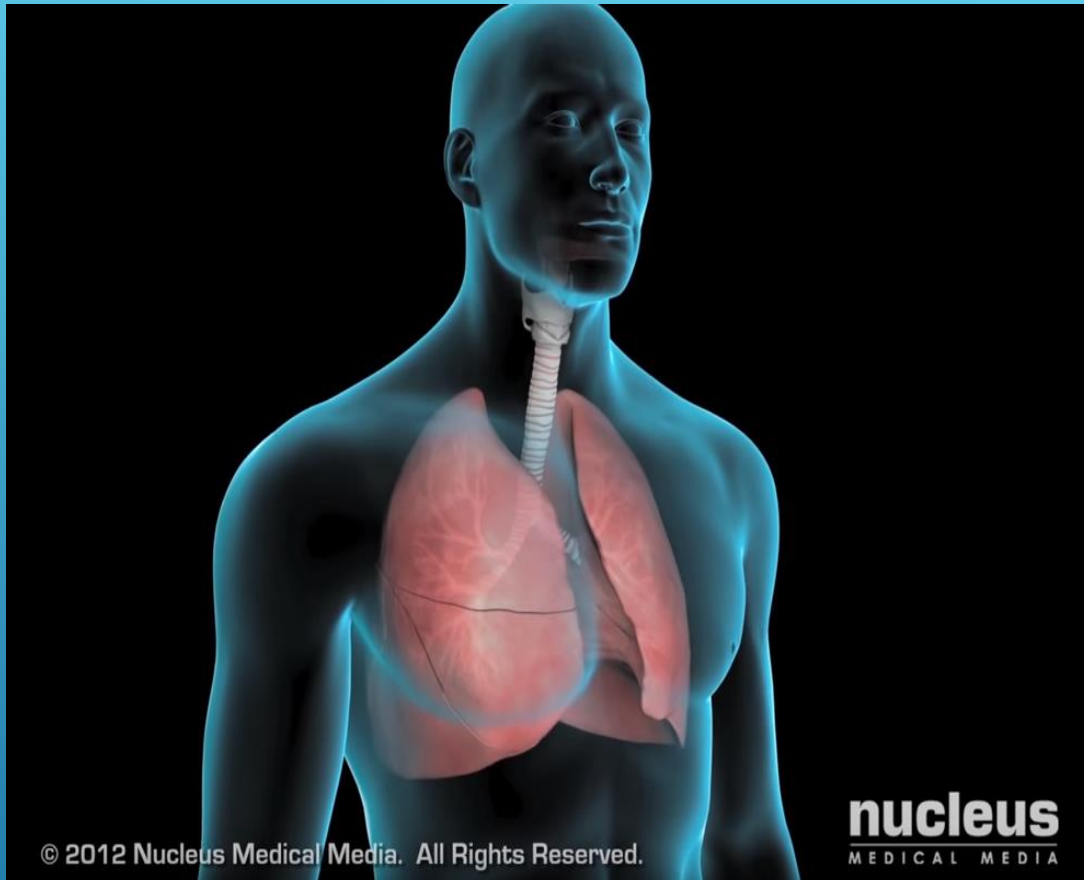
GREAT EDUCATIONAL VIDEO FOR CHILDREN REGARDING ASTHMA PATHOPHYSIOLOGY, INHALERS: CONTROLLER VS RESCUE, ASTHMA EMERGENCIES AND TRIGGERS. A SERIES OF 5 EPISODES.



HOW DOES ASTHMA WORK? - CHRISTOPHER E. GAW

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=PZFLLDI-SL3W](https://www.youtube.com/watch?v=PZFLLDI-SL3W)

VERY GOOD OVERVIEW OF ASTHMA, FOR OLDER KIDS (MIDDLE/ HIGH SCHOOL) AND PARENTS. DOES NOT EDUCATE ON PROPER INHALER TECHNIQUE BUT DISCUSSES RESCUE VS CONTROLLER MEDICATIONS AND EFFECTS ON THE AIRWAY.



ASTHMA

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=BHXWGF5DY&T=108S](https://www.youtube.com/watch?v=BHXWGF5DY&T=108S)

BEAUTIFUL ANIMATED GRAPHICS. GOOD FOR OLDER KIDS AND PARENTS. SHOWS AN ADULT USING A RESCUE INHALER BUT WITHOUT A SPACER AND TECHNIQUE IS POOR



Asthma Patient Resources and Videos

This library includes videos and other resources for asthma patients and caregivers.

Videos

- [Belly Breathing \[video\]](#)
Learn how to use belly breathing to help with shortness of breath from COPD, asthma or other lung diseases.
- [How to Clean a Nebulizer \[video\]](#)
Learn how to properly clean a nebulizer with the American Lung Association.
- [How to Use a Diskus Asthma Inhaler \[video\]](#)
Watch this American Lung Association video to learn the correct way to use your Diskus® asthma inhaler.
- [How to Use a Flexhaler Asthma Inhaler \[video\]](#)
Watch this American Lung Association video to learn the correct way to use your Flexhaler® asthma inhaler.
- [How to Use a Metered-Dose Inhaler with a Spacer or Valved Holding Chamber \[video\]](#)
Watch this American Lung Association video to learn the correct way to use your metered dose (MDI) asthma inhaler.
- [How to Use a Nebulizer \[video\]](#)
Learn how to properly use a nebulizer to take your COPD or asthma medication.
- [How to Use a Peak Flow Meter \[video\]](#)
A peak flow meter is a hand-held device used to measure your ability to push air out of your lungs. A peak flow meter may help identify causes of your asthma at work, home or play.
- [How to Use a Twisthaler Asthma Inhaler \[video\]](#)
Watch this American Lung Association video to learn the correct way to use your Twisthaler® asthma inhaler.
- [Pursed Lip Breathing \[video\]](#)
Learn how to use pursed lip breathing to help with shortness of breath from COPD, asthma or other lung diseases with the American Lung Association.
- [What Is Asthma \[video\]](#)

WHAT IS ASTHMA

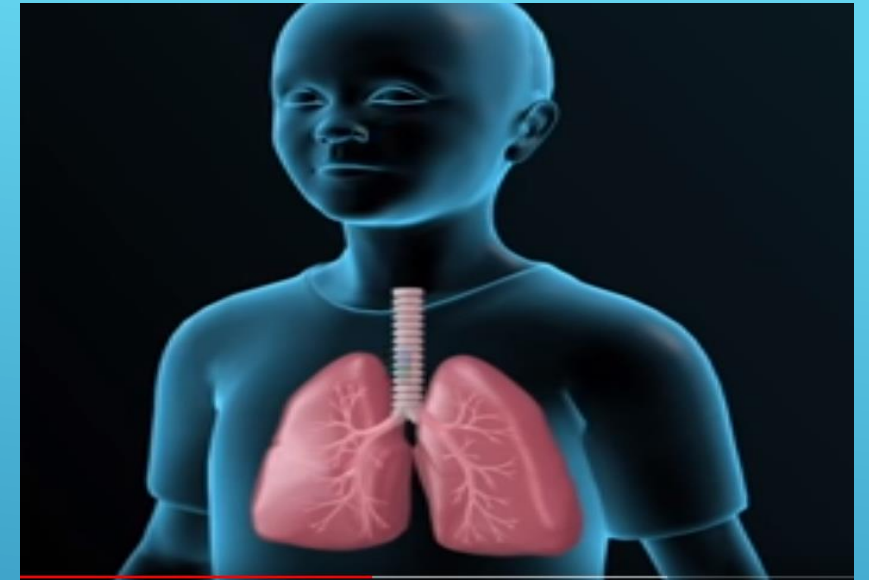
[HTTPS://WWW.LUNG.ORG/LUNG-HEALTH-AND-DISEASES/LUNG-DISEASE-LOOKUP/ASTHMA/PATIENT-RESOURCES-AND-VIDEOS/VIDEOS/WHAT-IS-ASTHMA.HTML](https://www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/patient-resources-and-videos/videos/what-is-asthma.html)

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=TIZDSIKN1KG](https://www.youtube.com/watch?v=TIZDSIKN1KG)

SHORT, INFORMATIVE VIDEOS IN SPANISH AS WELL

VIDEOS:
**HOW TO USE AN INHALER WITH
A SPACER**





USING AN INHALER WITH A SPACER MASK

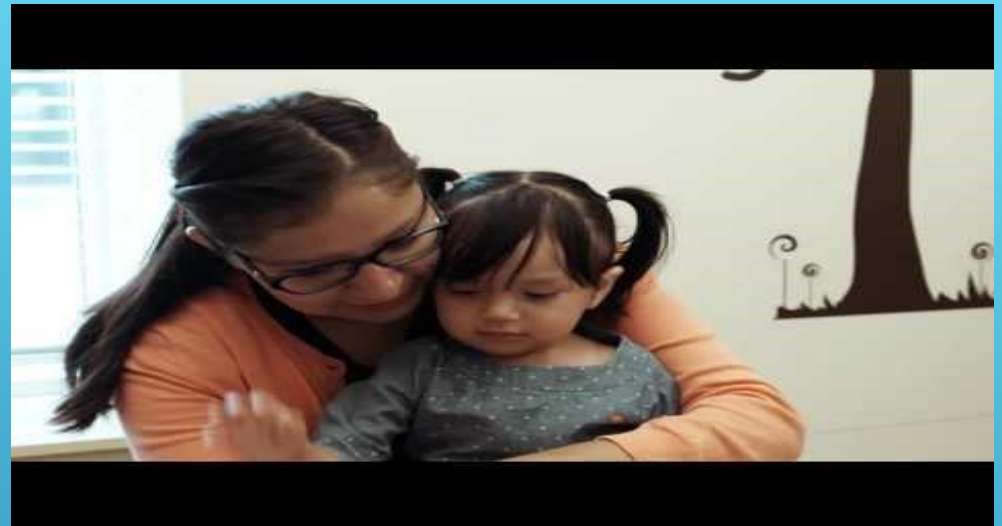
[HTTPS://WWW.YOUTUBE.COM/WATCH?V=VON7CYXCJ2C](https://www.youtube.com/watch?v=von7cyxcj2c)

DEMONSTRATES HOW TO CLEAN SPACER AND MASK ALSO



Cherry Health

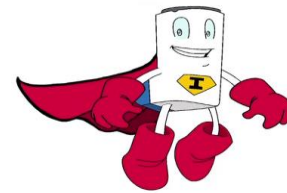
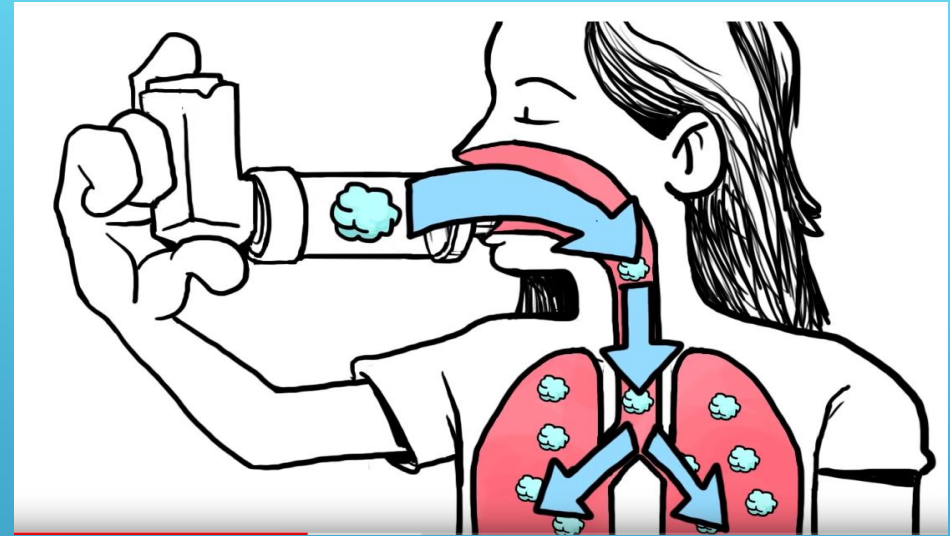
Usar un espaciador



SPACER FOR PARENTS (SPANISH)

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=ZENHYI2E--I](https://www.youtube.com/watch?v=ZENHYI2E--I)

INSTRUCTIONAL VIDEO IN SPANISH DEMONSTRATING INHALER USE WITH A SPACER AND FACE MASK FOR A TODDLER. ALSO GIVES CLEANING INSTRUCTIONS FOR THE AEROCHAMBER.



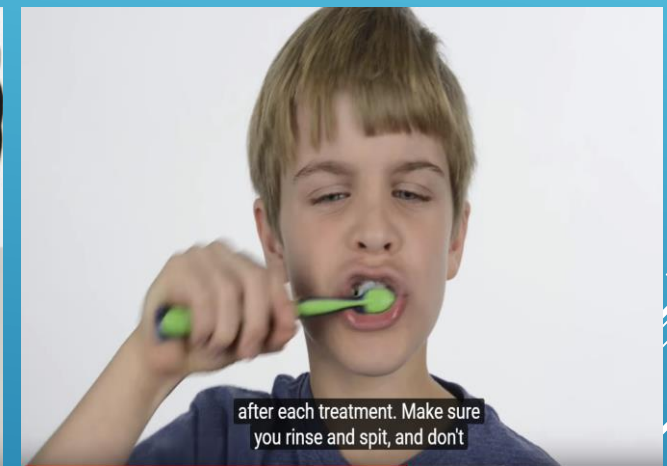
IGGY AND THE INHALERS

Episode #4: How to use an inhaler

ASTHMA SPACER AND ASTHMA INHALER - FOR KIDS WITH ASTHMA

[ASTHMAHTTPS://WWW.YOUTUBE.COM/WATCH?V=IFES0IR9K_S](https://www.youtube.com/watch?v=IFES0IR9K_S)

FUN EDUCATIONAL VIDEO OF USING AN INHALER WITH A SPACER FOR ELEMENTARY/ MIDDLE SCHOOL AGED CHILDREN



HOW TO USE AN MDI WITH A SPACER

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=0BUGFCN44FA](https://www.youtube.com/watch?v=0BUGFCN44FA)

EXCELLENT INSTRUCTIONAL VIDEO, INCLUDES PRIMING THE MDI, CLEANING AND COUNTING DOSES



- [How to Use a Diskus Asthma Inhaler \[video\]](#)
Watch this American Lung Association video to learn the correct way to use your Diskus® asthma inhaler.
- [How to Use a Flexhaler Asthma Inhaler \[video\]](#)
Watch this American Lung Association video to learn the correct way to use your Flexhaler® asthma inhaler.
- [How to Use a Metered-Dose Inhaler with a Spacer or Valved Holding Chamber \[video\]](#)
Watch this American Lung Association video to learn the correct way to use your metered dose (MDI) asthma inhaler.
- [How to Use a Nebulizer \[video\]](#)
Learn how to properly use a nebulizer to take your COPD or asthma medication.

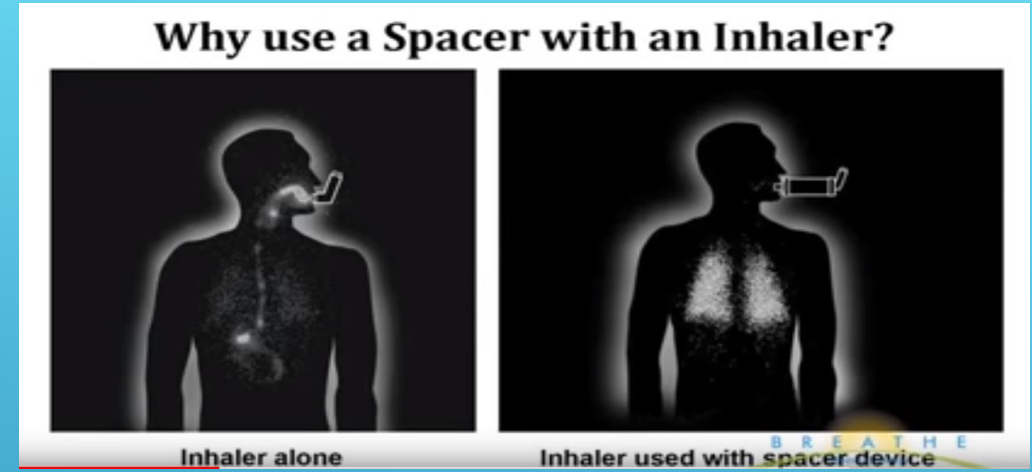
Cómo usar un inhalador de dosis medida con un espaciador



HOW TO USE A METERED DOSE ASTHMA INHALER WITH A SPACER OR VALVED HOLDING CHAMBER

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=A8WT5MONJ0I](https://www.youtube.com/watch?v=A8WT5MONJ0I)

OTHER VIDEOS AVAILABLE ON HOW TO USE A DISKUS, FLEXHALER AND HOW TO USE A NEBULIZER, ALL AVAILABLE IN SPANISH.



HOW TO: USE A SPACER/CHAMBER WITH YOUR ASTHMA INHALER

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=4GZDT8HGQCO](https://www.youtube.com/watch?v=4GZDT8HGQCO)

GREAT VIDEO FOR TEENS. INTRODUCES A PAPER SPACER- CAN ORDER ONLINE