

ASTHMA AND CHILDCARE PART 1

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OBJECTIVES

- By the end of training, participants will:
 - Understand the basics of asthma
 - Identify common asthma triggers
 - Recognize symptoms of an acute asthma attack
 - Identify types of asthma treatment
 - Understand the responsibilities of childcare providers

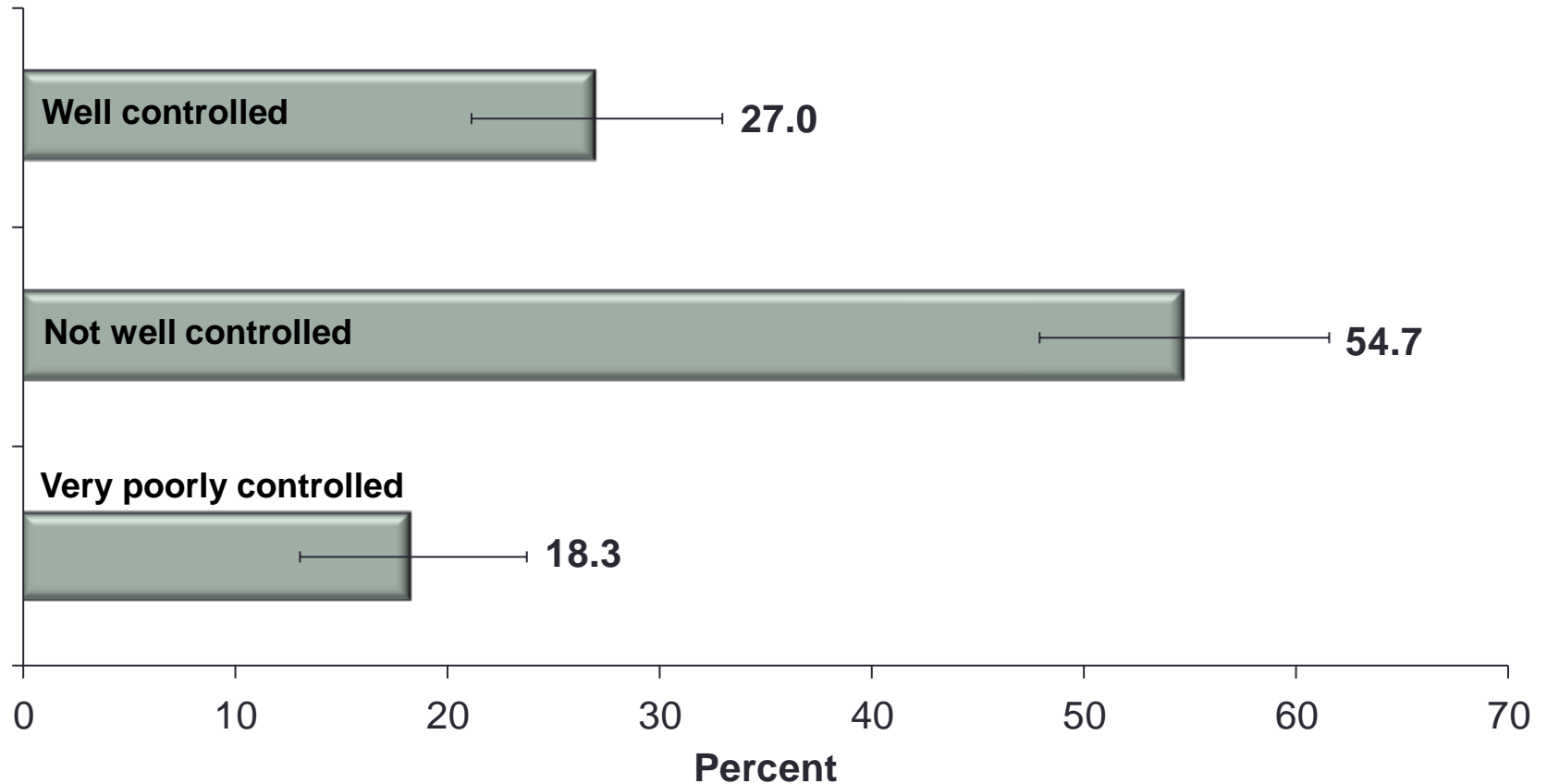


ASTHMA IN INDIANA

- 9.5% of Indiana children have asthma
 - Approximately 150,000 children
- Children age 0-4 have the highest rates of emergency department visits for asthma of any age group in Indiana
- Asthma is the leading cause of absenteeism in Indiana



ASTHMA CONTROL AMONG CHILDREN (0–17 YEARS), INDIANA, 2006–2010



*Percents are presented with 95% confidence intervals.

Source: [CDC](#) and [ISDH DAT](#). (2012). *Behavioral Risk Factor Surveillance System Child Multi-year Asthma Call-back Survey, 2006-2010*. Indiana State Department of Health

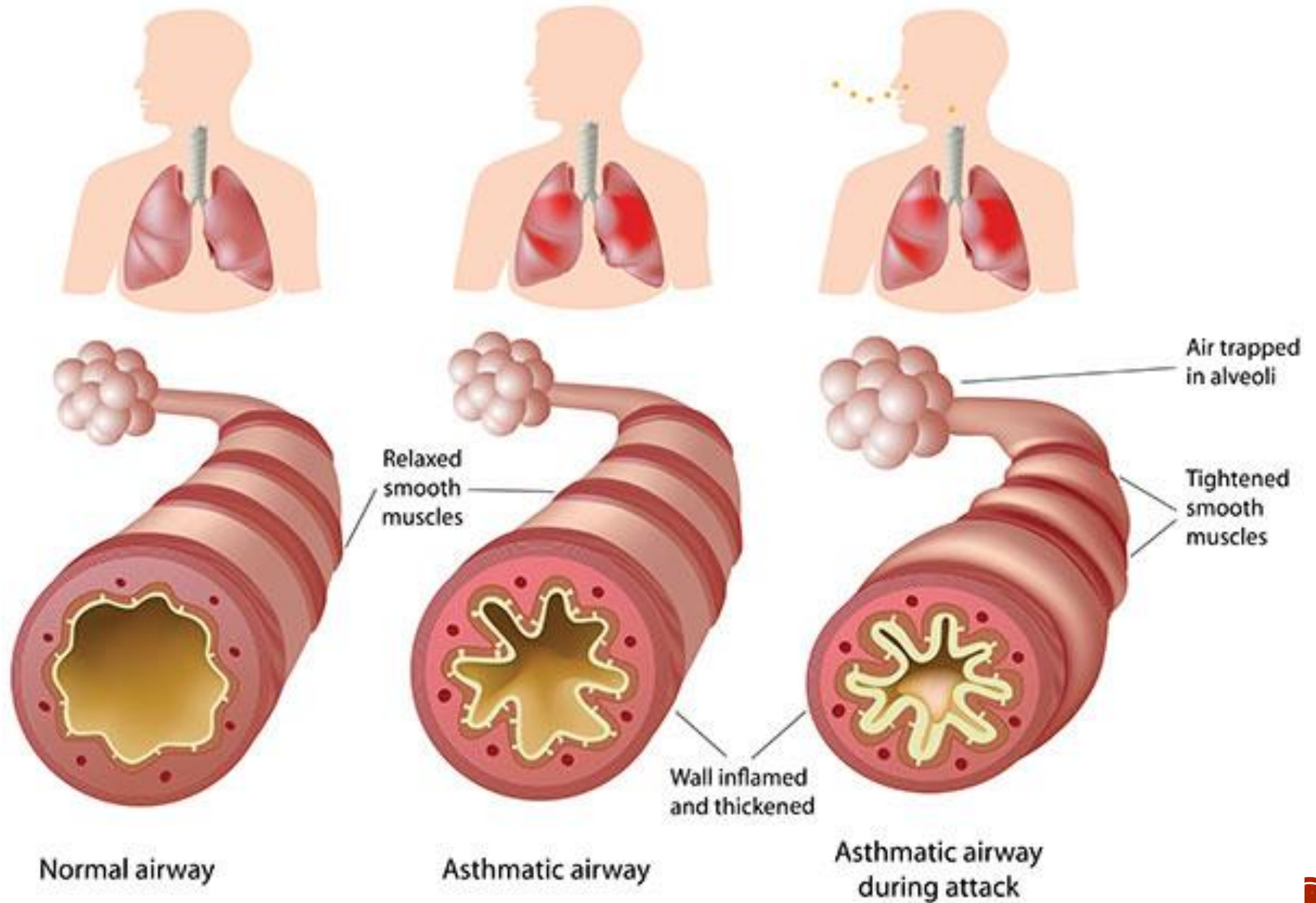


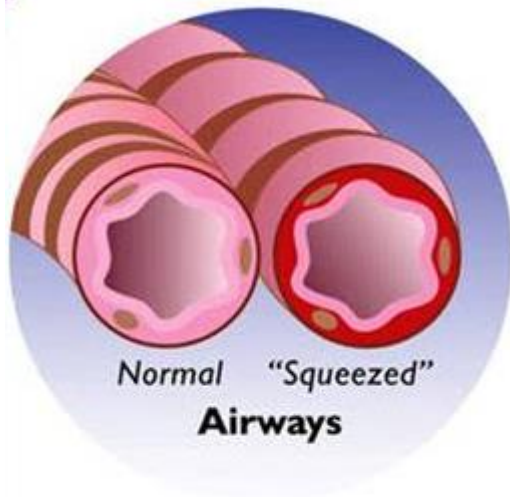
ASTHMA DEFINITION

- Asthma is a chronic inflammation of the bronchial tubes (airways) that causes swelling and narrowing (constriction) of the airways.
- The result is difficulty breathing.
 - Narrowing is usually totally or partially reversible when treatments are initiated quickly.
- Untreated asthma may cause scar tissue in the lungs.

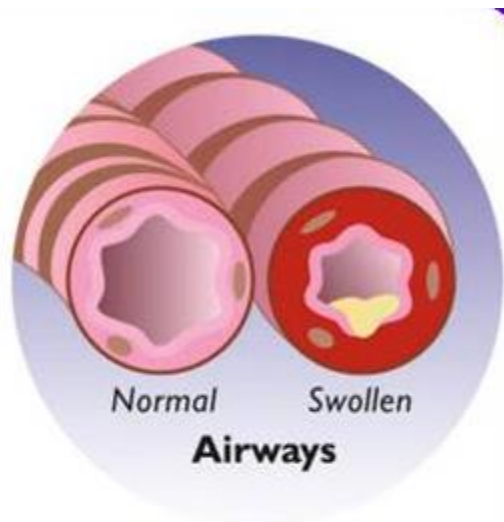


Asthma and Your Airways





- **Early Asthma**
 - Tightening of the muscles narrows the air tube and impedes flow



- **Late Asthma**
 - Lining of the airway becomes inflamed with swelling and mucus production



ASTHMA SYMPTOMS

- Cough and/or wheeze
- Difficulty breathing with or without exercise
- Chest tightness
- Breathlessness
- Presence of other allergic conditions
 - Eczema
 - Rhinitis (runny nose) or sinusitis
 - Very loud wheezing
 - Altered/slowed growth patterns



EXAMPLES OF SOME ASTHMA TRIGGERS

MOLD

PET DANDER

**HOUSE DUST/
CLEANING**

**SECONDHAND
SMOKE**

EXERCISE

**TEMPERATURE
CHANGES/
POLLEN**

**HOUSEHOLD
PESTS**

**VEHICLE
EXHAUST**

**CHEMICAL
FRAGRANCES**

PESTICIDES



ASTHMA TRIGGERS: ALLERGENS

Trigger

- Dust mites
 - Found in carpet, bedding, stuffed animals
 - Can cause asthma, as well as trigger symptoms
- Pet Dander

To Reduce Exposure:

- Dust mites
 - Vacuum regularly (HEPA preferred)
 - Wash bedding and stuffed animals weekly in hot water
 - Remove carpeting if possible
- Do not allow pets with fur or feathers inside (dander may still be on people's clothing)



ASTHMA TRIGGERS: ALLERGENS

Trigger

- Pests



To Reduce Exposure:

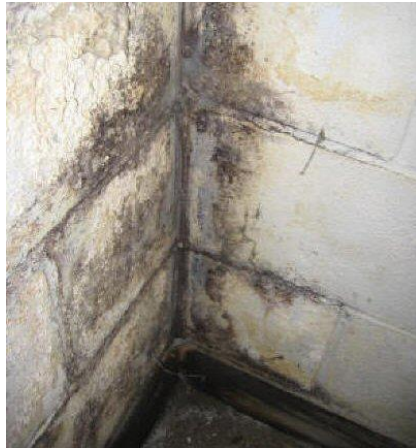
- Immediately clean crumbs and spilled liquids.
- Store foods in sealed plastic containers. Remove all cardboard containers.
- Place garbage in trash cans with fitted lids. Empty trash cans daily.
- Watch for puddles from leaking pipes, etc.
- Seal cracks around doors, windows, and foundation.



ASTHMA TRIGGERS: ALLERGENS

Trigger

- Mold



To Reduce Exposure:

- Have proper ventilation and air circulation
- Repair water leaks immediately
- Clean moldy surfaces with bleach water
- Empty dehumidifier pans and refrigerator condensation pans
- Avoid overwatering plants
- Replace absorbent materials that have been wet for more than 48 hours
- Keep indoor humidity <50%



ASTHMA TRIGGERS: IRRITANTS

Trigger

- Odors
- Tobacco Smoke

To Reduce Exposure:

- Avoid products with strong odors: perfume, scented candles, cleaning products with strong odors, etc.
- Encourage parents who smoke to do so outside the home and car.
- Wear a jacket when smoking outside that can be removed before returning to the classroom (the chemicals stay on hair and clothes).



ASTHMA TRIGGERS: IRRITANTS

Trigger

- Air Pollution
- Changes in Weather

To Reduce Exposure:

- Limit outdoor activities when pollution levels are high (www.smogwatch.IN.gov).
- Request that parents avoid idling their vehicles.
- Try to breathe through the nose.
- Cover mouth with a scarf or mask when outdoors in the cold.
- Check pollen count and mold counts and limit outdoor activities during high levels (www.aaaai.org/nab)



EXERCISE INDUCED ASTHMA

- Additional symptoms include:
 - Endurance problems during or after vigorous activity
- Exercise induced asthma episodes begin during exercise
 - Peak 5-10 minutes into exercise
- Symptoms often spontaneously resolve in another 20-30 minutes



ASTHMA MANAGEMENT GUIDELINES

- Identify allergenic and environmental triggers
- Avoid triggers as much as possible
- Avoid exposure to tobacco smoke
- Have a yearly influenza vaccine
 - Receive all recommended childhood vaccines
 - Early anti-inflammatory treatment is important
 - All children with asthma need a short-acting inhaled medication as needed for symptom control
 - Many will require daily long-term control medications



ASTHMA MANAGEMENT GOALS

- Minimal or no chronic symptoms, day or night
- Minimal or no episodes
- No limitations on activities
 - No missed school days or parent sick days
- Minimal use of rescue medications
- Maintain (near) normal pulmonary function
- Minimal or no adverse side effects from medications



ASTHMA MANAGEMENT PLAN

- Every child with asthma should have one
- Completed by a health care provider
- Should include list of known asthma triggers
- Should include list of medications, what they are used for, and when to use them
- Includes “zones” based on current symptoms and actions to take during each zone

