

# Winning with Asthma: Practical Tips For Coaches



Nebraska Coaches  
Association  
Summer 2014

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Community Asthma Education Initiative

# Pro's Who Have Asthma:

Emmit Smith-NFL Pro Running Back

Dominique Wilkins - NBA

Gary Roberts - NHL

Amy Van Dyken - Olympic Gold Medalist (swimming)

Jackie Joyner-Kersey - Olympic Gold Medalist (track & field)

Alberto Salazar-Marathon Runner

Jerome "The Bus" Bettis -NFL Pro Running Back

Greg Louganis - Olympic diver

# Did you know?

- On a team of 15, you can expect at least one player to have asthma
- There were 70 reported incidents of asthma emergencies or anaphylaxis protocol being implemented 2012-2013
- August September October and November
- Out of 50 students with asthma history only 26% had Asthma Action Plans in place

(AIRE) Asthma/ Anaphylaxis Intervention Resources and Education

Do you know who  
has Asthma  
on your team?



# Asthma and the Coach

- Asthma can happen anywhere and anytime
- Coaches should be responsible for a safe environment and be prepared for ASTHMA
- Coaches role is to help players manage their asthma and provide support for the athlete with asthma

# The Good News



- Asthma **CAN** be controlled
- Children with asthma are just like any other child!
- Children with asthma can play sports just like any other child!

# The Goal of Asthma Management

*“Children should live happy, healthy, physically active lives, without asthma symptoms slowing them down “*



# What Is Asthma?

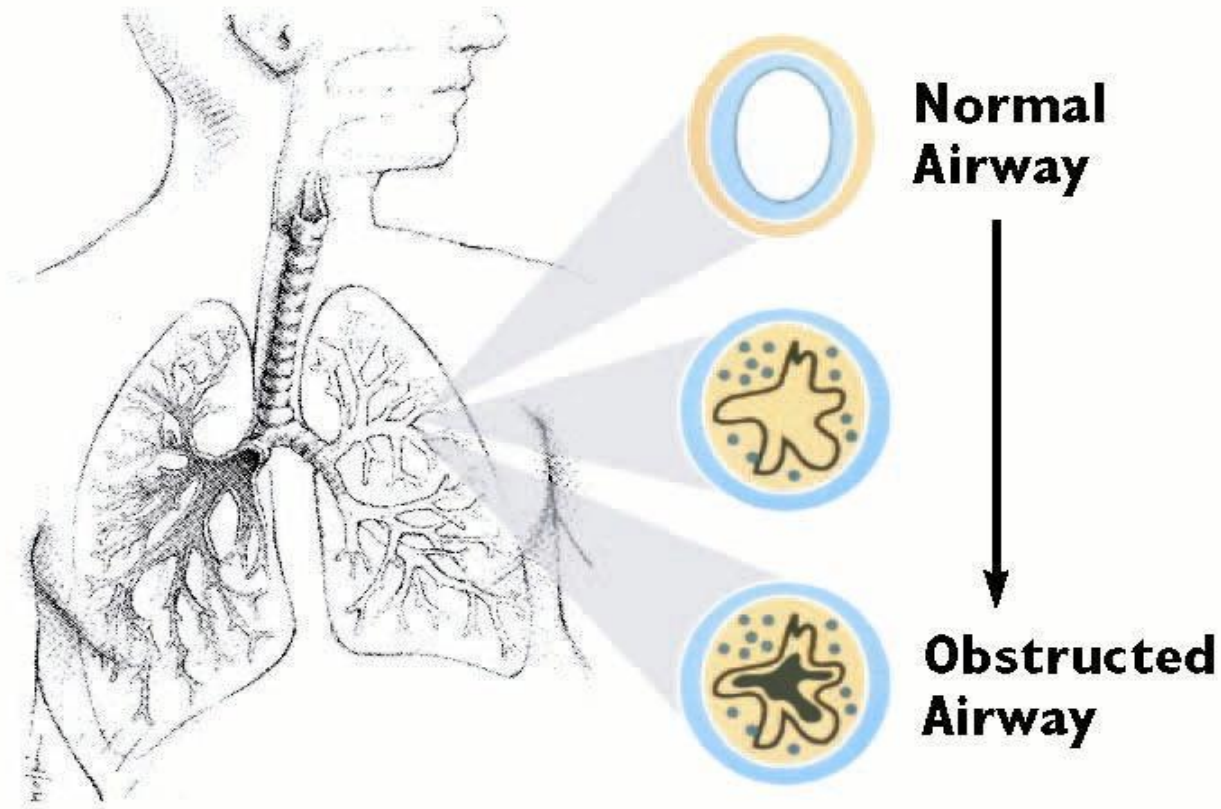
**Asthma is a chronic disease that causes:**

- ✓ Tightening of the muscles surrounding the airways (Bronchoconstriction/spasm)
- ✓ Swelling of the small airways (bronchioles)
- ✓ Over production of sticky mucus in the airways



# What happens?

## Asthma Episodes



# Common Symptoms Of Asthma

- \* Frequent cough, especially at night
- Shortness of breath or rapid breathing
- Chest Tightness
- Wheezing
- Behavior changes (ie; anxious, lethargic agitated, confused)

**\*KNOW  
YOUR  
TRIGGERS\***



**\*KNOW  
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TRIGGERS\***



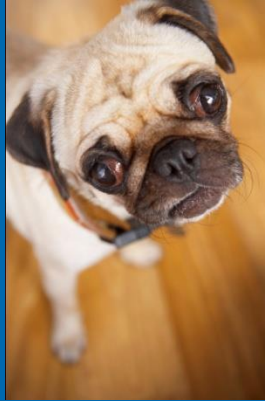
# Asthma Triggers



- Tobacco smoke
- Mold and mildew
- Pollutants resulting from poor ventilation
- Pets with fur or feathers
- Cockroach or mouse droppings
- Strong Odors (chemicals, cleaning agents, paint, air fresheners, perfumes, dry erase markers, magic markers, glue/paste, fumes from soldering or welding)
- Cold / damp weather
- **Exercise**
- Extreme emotional expression (stress, anxiety, anger or crying)
- Mechanical responses such as prolonged sneezing, yelling or laughing
- Common cold, influenza or other respiratory infections
- Certain foods –peanuts, milk, soy, shellfish, eggs

# Reducing Asthma Triggers

## ➤ Animal Dander



- Keep furred or feathered pets out of the home
- Keep out of sleeping areas-keep door closed
- Cover air vents with heavy material to filter the air
- Remove carpets and furniture with cloth coverings

# Reducing Asthma Triggers

## ➤ Dust mites

- Encase mattress and pillows in dust proof cover
- Wash bed linens in hot water weekly
- Reduce humidity to <60%
- Remove carpets from bedrooms
- Keep stuffed toys out of bed and wash or freeze weekly
- Change your pillow case every night



# Reducing Asthma Triggers

## ➤ Cockroaches

- Keep food and garbage in closed containers
- Use poison baits, powders, gels, paste or traps
- Keep poisons away from pets and **KIDS!**
- If spray is used stay out of the room until odor clears





# Reducing Asthma Triggers



Indoor Mold

**Fix leaky faucets, pipes**

- **Clean moldy surfaces with bleach cleaners or non-toxic cleaners**



# Reducing Asthma Triggers

## ➤ Pollen and Outdoor Mold



- Try to keep windows closed
- Stay indoors with windows closed from late morning to afternoon
- Take a shower before bed and if you have a bed partner they should shower too!
- Ask your doctor if you need to take or increase anti-inflammatory medicine before your allergy season starts

# Reducing Asthma Triggers

## ➤ Irritants



- Tobacco Smoke
  - If you smoke ask your doctor about ways to quit. Ask family members to quit too.
  - Do not allow smoking in your home or car
  - Do not expose yourself to second hand smoke

# Reducing Asthma Triggers

- Smoke, Strong Odors and Sprays
  - Try not use wood burning stove, fireplace or kerosene heater
  - Try to stay away from strong odors and sprays



# Reducing Asthma Triggers cont...

## ➤ Vacuum Cleaning



- Try to get someone else to vacuum for you once or twice a week
- Stay out of rooms during vacuuming and for a short while after
- If you vacuum use a dust mask, double layered or micro-filter vacuum bag or vacuum with a HEPA filter

# Reducing Asthma Triggers

- Sulfites in foods and beverages
  - Don't eat dried fruit, processed potatoes or shrimp if they cause asthma symptoms (Beer and Wine have sulfites too)



- Cold Air
  - Cover your nose and mouth with a scarf



- Other medications
  - Tell your doctor about the medicine you take



# Every Child Is Unique!



Wheezing and coughing- most common symptoms *BUT*

Symptoms and Triggers are **unique** to each child

Every child should have:

- \*an Asthma Action Plan (AAP)
- \*access to a quick relief inhaler!

# Exercise Induced Asthma





# Exercise-Induced Asthma

- Triggered by vigorous or prolonged exercise or physical exertion
- **Symptoms**
  - Coughing, chest tightening, wheezing, unusual fatigue, shortness of breath
  - May begin during exercise and can worsen 5 to 10 minutes after exercise
- **Prevention**
  - Take medication 15-20 minutes prior to exercise

# Managing Exercise Induced Asthma

- ✓ Ensure athletes provide an Asthma Action Plan  
Have available at practices and events
- ✓ Some athletes may use Quick Relief (Albuterol)  
15 minutes before strenuous activity begins per  
AAP
- ✓ Warm-up and cool-down exercises are  
important
- ✓ Bullying or teasing a child with asthma  
symptoms is **NOT** acceptable.

# Managing Exercise Induced Asthma

- ✓ If an athlete is complaining of breathing difficulty- **BELIEVE IT** and take action!
- ✓ Never encourage a child to “tough it out” when having asthma symptoms
- ✓ Allow the athlete to continue to play **ONLY** when you know their breathing is normal again
- ✓ Inform athletes parents’ of breathing difficulties

# Quick Relief vs. Controller

## Quick Relief Medications

- Taken for symptom relief **OR**
- To prevent exercise induced asthma

## Controller Medications

- Taken every day to prevent swelling in the lungs
- Generally taken at home a.m. or p.m.

# “Quick Relief” Medications

- ✓ Coaching staff must be aware that an athlete is using this medication
- ✓ Medication must be immediately accessible
- ✓ Taken when needed to relieve symptoms
- ✓ Should be taken using a spacer or holding chamber
- ✓ Taken 10-15 min. before activity begins for exercise induced asthma

# Spacers/Holding Chambers

- Spacers/Holding chambers are used with inhalers to increase the effectiveness of the medication delivered



# Metered Dose Inhaler (MDI)

Proper delivery is essential to the treatment's effectiveness!

- Use a “spacer” or holding chamber
- Sit up or stand
- Shake well
- Exhale completely
- Activate the dose
- Slow, deep breath in
- Breath hold up to 10 secs.
- Wait 1 minute between inhalations



# Dry Powder Inhaler (DPI)

- Stand or sit up straight
- Load dose of medication
- Breathe out slowly and completely
- Put mouth around mouthpiece and inhale slowly and deeply
- Hold breath for up to 10 seconds
- Do not exhale in the device, shake it or wash it





# Asthma Action Plan (AAP)

- AAP's help you decide:
  - What medicines to take
  - When to take them
  - How much to take
  - When to get help



# Asthma Action Plan

The colors of a traffic light illustrate how to use peak flow levels to decide action steps.


Patient name		Date of birth	
Address			
City	State	Zip	
Parent's name		Parent's phone	
Doctor's name		Doctor's phone	
Doctor's signature		Date	



**Green means Go Zone!**  
Use controller medicine.

**Yellow means Caution Zone!**  
Add rescue medicines.

**Red means Danger Zone!** Get help from a doctor.

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**Identify the things which start an asthma attack:** (check all that apply)

- Exercise
- Cold air
- Perfume
- Dust
- Strong odors or fumes
- Carpets in rooms
- Respiratory Infection
- Humidity
- Aerosol sprays
- Mowed grass
- Chalk dust
- Tobacco smoke
- Change in temperature
- Pollens \_\_\_\_\_
- Molds \_\_\_\_\_
- Food \_\_\_\_\_
- Animals \_\_\_\_\_
- Other \_\_\_\_\_

## Go (Green)

You have ***all*** of these:  
breathing is good;  
no cough or wheeze;  
sleep through the night;  
can work and play.

Peak flow  
above \_\_\_\_\_



## Caution (Yellow)

You have ***any*** of these:  
first sign of a cold;  
exposure to  
known trigger;  
cough;  
mild wheeze;  
tight chest;  
coughing at night.

And/or peak  
flow from  
to \_\_\_\_\_



## Danger (Red)

Your asthma is getting  
**worse fast, including:**  
medicine is not helping  
within 15-20 minutes;  
breathing is hard  
and fast;  
nose opens wide;  
ribs show;  
lips blue;  
fingernails blue;  
trouble walking and talking.

And/or  
peak flow  
below \_\_\_\_\_



## Controller Medicines: use these every day

Medicine	How much to take	When to take it

For asthma with exercise take:

--	--	--

## Rescue Medicines: use for mild asthma attack

Medicine	How much to take	When to take it
First ⇒		
Next ⇒		

⇒ If rescue medicine is used more than 2 to 3 times a week, call your doctor.

## Take these medicines and call your doctor

Medicine	How much to take	When to take it
First ⇒		
Next ⇒		

**Get help from a doctor now! Your doctor will want to see you right away. If you can't contact your doctor, go directly to the emergency room or call 911. Do not wait. Make an appointment with your primary care provider within two days of an emergency room visit or hospitalization.**

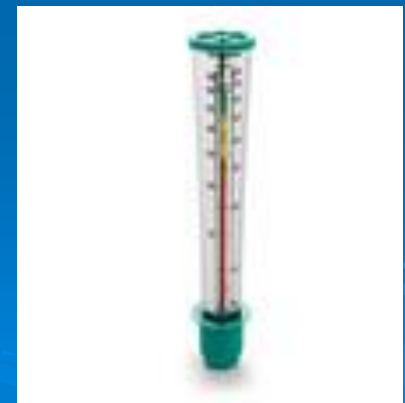
White - patient copy

Yellow - school copy

Pink - doctor copy

# Peak Flow Monitoring

- Used in asthma management
- Important part of the asthma action plan
- Measures the **velocity** of the air exhaled  
In the first second after a forced exhalation



# Peak Flow Monitoring

- Peak Expiratory Flow or (PEF) is a measure of the ability to push air out of the lungs
- “Personal Best” Peak Flow-
  - The highest peak flow number you can achieve when your asthma is under good control
- The 3-Zone System- Green, Yellow, Red

# The 3 Zone System



## ➤ Red Zone

- 50% of your ideal number
  - Signals Medical Alert-
  - Take your Rescue medication and call your doctor

## ➤ Yellow Zone

- 50-80% of your ideal number
  - Signals Caution- Follow your plan or call your doctor.

## ➤ Green Zone

- 80-100% of your ideal number
  - Signals All Clear

# Handling An Asthma Attack

1. **STOP** Activity
2. Remain calm and reassure the child
3. Don't leave the athlete alone
4. Follow Asthma Action Plan
5. Administer “quick relief” inhaler  
(Refer to AAP)
6. Contact the parent or guardian as necessary

# Call **911** if any of the following occur:

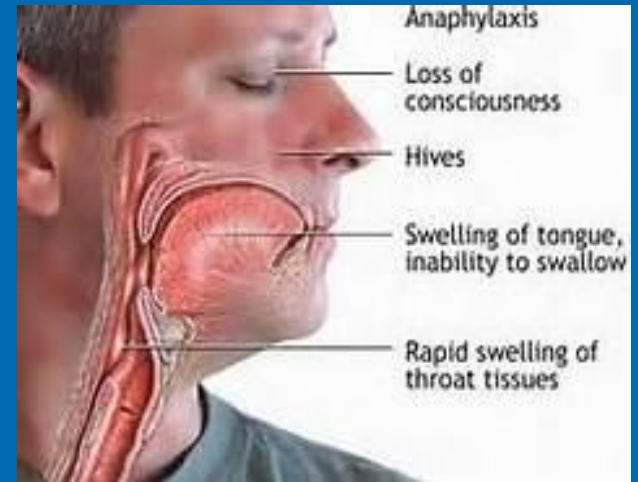
- **You are not sure what to do**
- Blueness of lips or nails
- Athlete unable to walk, talk or drink
- Athletes nostrils flaring out
- Athlete's neck, throat or chest retracting (sucking in)
- Athlete disoriented, lethargic or agitated
- Quick Relief (Albuterol) not relieving symptoms or not available
  
- **CONTINUE QUICK RELIEF (ALBUTEROL) INHALER**





# What is Anaphylaxis?

- Anaphylaxis is a sudden, severe, potentially fatal systemic allergic reaction that can involve various areas of the body
  - Symptoms occur within minutes to two hours after contact
  - Individuals with asthma, eczema or hay fever are at greater risk



# Anaphylaxis Symptoms

- Skin reactions, including hives along with itching, and flushed or pale skin (almost always present)
- A feeling of warmth
- The sensation of a lump in your throat
- Constriction of the airways, swollen tongue or throat, causing wheezing and trouble breathing
- A weak and rapid pulse
- Nausea, vomiting or diarrhea
- Dizziness or fainting

# Anaphylaxis Categories

- Food allergies
- Insect/bee/wasp stings
- Medications
- Exercise induced Anaphylaxis
- Latex



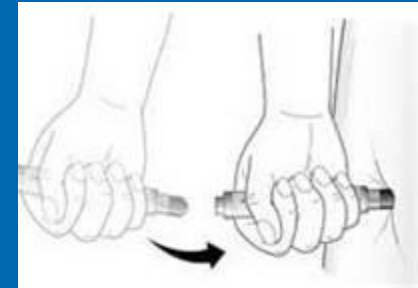
# EPI-PEN

## ➤ EPI-PEN AUTOINJECTOR

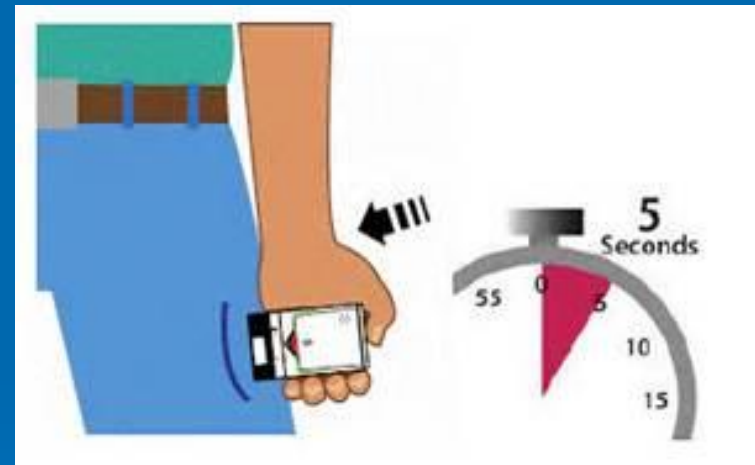
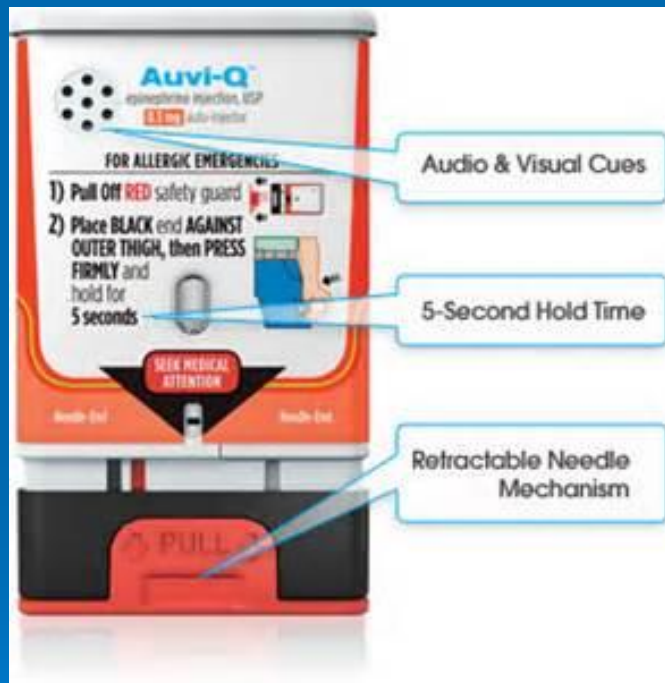


# EPI-PEN USE

- **PULL OFF THE SAFETY CAP**
- Firmly **swing and push** tip into outer thigh
- **HOLD 10 seconds** to deliver the drug
- **SEEK EMERGENCY MEDICAL ATTENTION**



# Auvi-Q Auto-injector



# Rule 59

- \* If during school hours, follow **Rule 59** protocol\*
- Used **ONLY** in breathing emergencies when students either have **no meds** or their meds are **failing** them

# Improved Athletic Performance

- Athletes whose asthma is controlled perform as well as those without asthma
- Any athlete with asthma who is already “the best” can improve when they’re breathing better!
- More oxygen to the lungs means better performance on and off the field!



# Responsibilities

## ➤ Parent

- Notify school of allergies/asthma
- Provide medical documentation, instructions and medications as directed by a physician
- Participate in the development of an “Asthma Action Plan”
- Provide instructions for contacting parents or another adult in case of emergency



# Responsibilities

## ➤ Physician

- Provide a diagnosis and prescribe proper medication for school use
- Actively participate in the “Asthma Action Plan
- Monitor student’s health status regularly and communicate need for accommodation of the action plan.



# Responsibilities

## ➤ Student

- Avoid known triggers for allergies/asthma
- Recognize the need for carrying asthma medication (inhaler) and allergy medication (Benadryl, EpiPen, etc.)
- Understand and demonstrate proper use
- Report symptoms to teacher/nurse
- Actively participate in “Asthma Action Plan”



# Responsibilities

## ➤ School

- Participate in development of an “Asthma Action Plan”
- Implement environmental guidelines that promote safe and healthy indoor air quality
- Ensure there is a staff member available to administer medications and provide emergency care
- Provide basic, general education to staff regarding asthma and anaphylaxis.



# FREE In home assessments

- A Registered Nurse, Asthma Educator or Respiratory Therapist will:
  - Supply you with important asthma information
  - Help you identify “triggers” in your home that can make asthma worse
  - Provide you with a hypoallergenic mattress cover, pillow cover AND other supplies to help you manage your asthma better



**CONTACT:**  
Paulette @ 402-  
525-6418 or  
Dawn @ 402-  
617-1834  
**TO SCHEDULE  
AN APPT!**

# Coaches Review



- **KNOW** which athletes have asthma
- **ASK** for Asthma Action Plans
- **ENSURE** medication available
- **BE PREPARED** to manage an asthma attack

**\*\***If you have a concern about an athlete, talk with the child and the parents **\*\***

Everyone Wins When An Athlete Plays  
Their Game To The Fullest!



# Community Asthma Education Initiative

## The C.A.E.I. Team

- Cindy Rempe, R.N., BS, AE-C  
Coordinator, C.A.E.I.
- Shane Kennett, Asthma Clinic  
Coordinator
- Nan Nathenson, RRT, RYT
- Paulette Kuhlman, BSN, MBA, AE-C
- Dawn Welchoff, RRT



# Additional Resources

- Winning with Asthma
  - [www.winningwithasthma.org](http://www.winningwithasthma.org)
- American Lung Association of NE
  - [www.lungnebraska.org](http://www.lungnebraska.org)
- Allergy & Asthma Network Mothers of Asthmatics
  - [www.breatherville.org](http://www.breatherville.org)
- US Environmental Protection Agency
  - [www.epa.gov/iaq](http://www.epa.gov/iaq)
- Centers for Disease Control and Prevention
  - [www.cdc.gov/healthyyouth/asthma](http://www.cdc.gov/healthyyouth/asthma)
- Asthma/Anaphylaxis Interventions Resource and Education
  - [www.airenebraska.org](http://www.airenebraska.org)

THANK YOU!

