Objectives

• Discuss diagnosis of asthma

• Identify treatments of asthma

• Demonstrate the importance of correct inhaler technique

• Discuss relevant policies & implications for asthma management in schools
Asthma Facts
Asthma UK Website…asthma.org.uk

A child is admitted to hospital every 20 minutes because of asthma

1.1million children in UK (1 in 11)

UK has highest rates of asthma & asthma deaths in Europe

25% of GPs workload is children & young people
What is Asthma?

Inflammatory condition of airways

Sensitive airways narrow easily in response to wide range of triggers

Usually reversible
Symptoms

Cough

Breathlessness

Wheeze

Tight chest
Diagnosis…increasing probability

Frequent & recurrent
Worse at night & early in morning
Occur in response to triggers
Occur apart from colds
Personal history of atopy
Family history of atopy (particularly maternal)
Widespread wheeze on auscultation
Improvement in response to adequate treatment
Diagnosis…lower probability

No interval symptoms
Cough only, no wheeze or SOB
Moist cough
Normal PF/spirometry/physical exam when symptomatic
No response to treatment
Earlier onset of wheeze, better diagnosis
Clinical features pointing to alternative diagnosis
High Probability of Asthma

Trial of treatment

Review & assess response

Further testing for those with poor response
Low Probability of Asthma

Consider more detailed investigations and specialist referral
The earlier onset of wheeze better the prognosis

Non-atopic wheeze as prevalent as atopic wheeze in school aged children
Remember;

Diagnosis is a clinical one

Based on recognising a characteristic pattern of episodic symptoms in absence of an alternative explanation.
Triggers

House Dust Mite
Colds
Pollen
Furry animals
Smoking
Exercise

Treatments

Stepwise Approach (below 5yrs) (5-12yrs) (over 12yrs)

• Short acting Beta 2 agonist/ipratopium bromide (Ventolin/Salbutamol, Bricanyl)/(Atrovent)

• Inhaled steroids (highest dose before referral)? (Becotide, Clenil, Pulmicort, Flixotide)
• Leucotriene receptor agonists
  (Montelukast/Singulair)

• Long acting bronchodilators
  (Serevent, Oxis)

• Combined inhalers
  (Seretide, Symbicort)
• Oral Steroids  
(Prednisolone)

• Options for severe persistent allergic asthma  
(Omalizumab)
Spacers

Reduce problems of poor inhaler technique

Significantly reduce oral absorption of inhaled steroids

As effective as nebulisers in acute asthma

Can be adapted for all ages to use
My Asthma

My asthma is part of me
Although it is nothing you can see
There is never a day
When I can’t sit, run or play
Like most other kids
Without getting a pain in my ribs
It’s hard not easy
To always be wheezy
I can’t get enough air
Like being squeezed by a bear
I would get paler and paler
Unless I have my inhaler
If my breathing isn’t right
My mum sits by me at night
I have 3 pills I swallow every day
And 3 inhalers to make me ok
You might not always see
But asthma is part of me.
At School/Child Care Settings

Supporting Pupils at School with medical Conditions
DOH 2015
• Strengthen links between health services & schools

Asthma UK
• Advice for parents when speaking to teachers

Designing and commissioning services for children and young people with asthma: A good practice guide 2013
• School-based education for children with asthma can improve knowledge, self-efficacy/management and may increase attendance
Health Conditions in Schools Alliance
medicalconditionsatschool.org.uk

The Alliance successfully campaigned the Government to amend the Children and Families Act 2014 to include a duty on schools in England to support children with health conditions.
School Asthma Policies

- The school’s philosophy & responsibilities
- The parent’s responsibilities
- Access to inhalers
- Staff awareness
- Information about the reliever inhalers
- What to do in the event of an asthma attack
National Review of Asthma Deaths 2014

28 children died between Feb 2012-Jan 2013

10 children below 10 years of age
18 children between 10 and 18 years of age
National Review of Asthma Deaths 2014

4/28 children were known to social services

16/28 under specialist care

21/28 children died before reached hospital

18/28 died between March and Sept
Points to consider

Asthma Action Plans

Smoking

Repeat Prescriptions

Asthma Guidelines (BTS /SIGN Guidelines update Sept 2016)
Co-existing allergies

HOW, WHY & WHEN knowledge

GP review within 48 hours of discharge
National Paediatric Asthma Collaborative: Collaborating to improve quality of care for children's asthma

Five strategic clinical networks


Developments include

- Asthma Friendly schools Project (Islington)

- E-learning & education for all
Asthma Action Plans

Clear & simple

Individualised

“Traffic light” system
My Asthma Plan

1. My daily asthma medicines
   - My preventer inhaler is called _______ _______ and its colour is _______.
   - I take _______ puff/s of my preventer inhaler in the morning and _______ puff/s at night. I do this every day even if I feel well.
   - Other asthma medicines I take every day: ________________________________

2. When my asthma gets worse
   - I’ll know my asthma is getting worse if:
     - I wheeze or cough, my chest hurts or it’s hard to breathe. or
     - I’m waking up at night because of my asthma, or
     - I’m taking my reliever inhaler (usually blue) more than three times a week, or
     - My peak flow is less than __________

   If my asthma gets worse, I should:
   - Keep taking my preventer medicines as normal.
   - I also take _______ puff/s of my reliever inhaler (usually blue) every four hours.
   - If I’m not getting any better doing this I should see my doctor or asthma nurse today.

Remember to use my inhaler with a spacer (if I have one)

Does doing sport make it hard to breathe?

If yes: I take: _______ puff/s of my reliever inhaler (usually blue) beforehand.
My Asthma Plan

3. When I have an asthma attack
I’m having an asthma attack if:
- My reliever inhaler (usually blue) isn’t helping, or
- I can’t talk or walk easily, or
- I’m breathing hard and fast, or
- I’m coughing or wheezing a lot, or
- My peak flow is less than __________

My asthma triggers (things that make my asthma worse)

Make sure you have your reliever inhaler (usually blue) with you. You might need it if you come into contact with things that make your asthma worse.

When I have an asthma attack, I should:
Sit up — don’t lie down. Try to be calm.
Take one puff of my reliever inhaler every 30 to 60 seconds up to a total of 10 puffs.

Even if I start to feel better, I don’t want this to happen again, so I need to see my doctor or asthma nurse today.

If I still don’t feel better and I’ve taken ten puffs, I need to call 999 straight away. If I am waiting longer than 15 minutes for an ambulance I should take another __________ puff/s of my reliever inhaler (usually blue) every 30 to 60 seconds (up to 10 puffs).

I need to see my asthma nurse every six months
Date got my asthma plan:

Date of my next asthma review:

Doctor/asthma nurse contact details:

Parents — get the most from your child’s action plan
Make it easy for you and your family to find it when you need it
- Take a photo and keep it on your mobile (and your child’s mobile if they have one)
- Stick a copy on your fridge door
- Share your child’s action plan with school, grandparents and babysitter (a printout or a photo).

You and your parents can get your questions answered:
Call Asthma UK’s friendly Helpline
Monday to Friday 9am to 5pm
0300 222 5800
Get information at www.asthma.org.uk

We are here for you
**MY ASTHMA ACTION PLAN**

**Name:** 

**DOB:** 

**Preventer:**

**Reliever:**

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**MY ASThma IS WELL CONTROLLED**

- Little or no cough or wheeze
- Sleeping not disturbed
- You are able to do your usual activities
- If you check your peak flow it is around your best
- Best peak flow: 

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**MY ASTHMA IS GETTING WORSE**

- You may have a cold or fever
- Coughing and feeling day and/or night
- If things do not settle within 48 hours then seek a medical review with your GP
- Your peak flow may be reduced

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**MY ASTHMA IS MUCH WORSE**

**I AM HAVING AN ASTHMA ATTACK**

- You can’t talk or walk easily
- You are breathing hard and fast
- You are coughing/whistling a lot
- Your blue inhaler is not working
- You are too breathless to do a peak flow

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**ACTIO**

- Take your preventer inhaler 
  
  *every day, even when well*

You should not be needing your reliever inhaler or every 4 hours but can take it with activities

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**ACTION**

- Take up to 10 puffs of your blue inhaler through your spacer
- Repeat every 3-4 hours and seek medical help
- If this is not working repeat 10 puffs spacer

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THIS IS AN EMERGENCY CALL 999

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**NHS East Midlands**

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You could take a photo of your asthma Action Plan and keep it on your mobile

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Date Plan Made:
Guidance on the use of emergency salbutamol inhalers in schools (DOH 2014)

October 1st 2014

Emergency salbutamol inhalers for children with parental consent only and diagnosed asthma

Schools can buy

Who does training???
Resources

www.brit-thoracic.org.uk


www.asthma.org.uk

DOH (2014) Guidance on the use of emergency salbutamol inhalers in schools

www.medicalconditionsatschool.org.uk
Resources

Free Asthma Training Module by Education for Health & George Coller Memorial Fund

www.supportingchildrenshealth.org

• For all who look after children with asthma, takes about 1 hour to complete