The ABCs and 123s for Parents
Infants & Small Children
Allergy Prevention

• Allergic Reaction
  – The response of the immune system to a foreign substance that enters the body

• Common Allergies

- Bee or Insect Venom
- Antibiotics
- Pollen
- Animal Dander
- Nuts
- Shellfish
- Strawberries
- Coconut Oils
• **Signs of an Allergic Reaction**

- Rash
- Anaphylactic Shock
- Tightness in the Chest and Throat
- Difficulty Breathing
- Swelling – face, neck, tongue

• **Anaphylaxis / Anaphylactic Shock**
  – Airway passages swell and restrict breathing
  – Life-threatening emergency
Allergy Prevention

• Exclusive breast-feeding for the 1st 4-6 months
• For formula fed babies, use hydrolyzed infant formulas instead of cow’s milk formulas
• After age 4-6 months, begin feeding single-ingredient infant foods one at a time
• Do not delay introduction of solid foods beyond 6 months
• Defer the following:
  – Dairy – 1 year
  – Eggs – 2 years
  – Peanuts, nuts, and fish – 3 years
Button Batteries

- Coin Lithium Batteries
- More than 3,500 swallowing cases annually
- Average Age: 4
- Nonspecific Symptoms
- Ingestion incident NOT a choking incident
1. Coin is swallowed
2. Enters esophagus
3. Saliva triggers an electrical current
   Chemical reaction
   Resulting in severely burning the esophagus within two hours

*Once burning begins, damage can continue even after the battery is removed!
Where do they hide?

- Small Calculators
- Watches
- Car Key Remotes
- Key Fobs
- Flameless Candles
- Garage Door Openers
- Hearing Aids
- Kid’s Jewelry
- Key Chains (Flashlights)

GREETING CARDS!!!
Button Batteries

http://thebatterycontrolled.com
Button Batteries

Prevention

• Dispose of carefully
• Keep them out of reach
• Ask family members with hearing aids to keep out of reach
• Carefully inspect children’s toys and jewelry
• Do not purchase musical or animated greeting cards
  – At least do not allow your children to play with them unsupervised
• Share this message with friends and family!
Crib for Kids—Safe Sleep

- **Crib for Kids**
  - Provide safe sleep education and safe sleeping environments to mothers in need
  - 300 partners across the country
  - Making an impact on the rates of babies dying of accidental death due to unsafe sleeping environments
Sudden Unexpected Infant Death (SUID)
- Deaths in infants (< 1 year) that occur suddenly and unexpectedly and cause is not immediately obvious prior to investigation
- Big “umbrella” of all unexplained infant deaths

Sudden Infant Death Syndrome (SIDS)
- Subcategory of SUID
- Deaths in infants (< 1 year) that occur suddenly and unexpectedly and cannot be explained after thorough investigation
What is SIDS?

- Leading cause of death among infants aged 1-12 months
- Peak Occurrence Time: 2-4 months
- Higher incidence in:
  - Males
  - Colder months
  - Preterm or low birth weight infants
  - African Americans, American Indian, Alaska Native
Cribs for Kids—Safe Sleep

• SIDS is **NOT**...
  – Preventable
    • BUT the risks can be reduced
  – Caused by vomiting and/or choking
  – Caused by immunizations
  – Contagious
  – The result of child abuse or neglect
  – The cause of every unexpected infant death
Cribs for Kids—Safe Sleep

Triple Risk Model to Explain SIDS

Critical Period of Development
- First 6 months

Underlying Vulnerability
- Possible brainstem abnormality

Modifiable Pre- and Post-Natal Environmental Stressors
- Prone/side sleeping
- Soft bedding
- Overheating
- Bed sharing
- Nicotine exposure

Highest Risk for SIDS
Cribs for Kids—Safe Sleep

• Modifiable Pre- and Post- Natal Environmental Stressors
  – Prone/Side sleep position
  – Soft bedding
  – Overheating
  – Bed sharing
  – Nicotine exposure
Ribs for Kids—Safe Sleep

Modifiable Pre- and Post-Natal Environmental Stressor

- Prone/Side sleep position
  - Babies who sleep on their stomachs are less reactive to noise, experience sudden decreases in blood pressure and heart rate control, and experience less movement, higher arousal threshold, and longer periods of deep sleep
Truth about prone/side sleep position

Step 1
Life-threatening event → Asphyxia and brain hypoperfusion

Step 2
Failure of arousal → Progressive asphyxia

Step 3
Hypoxic coma

Step 4
Bradycardia and gasping

Step 5
Failure of autoresuscitation resulting in death
Truth about aspiration
Cribs for Kids—Safe Sleep

Modifiable Pre- and Post-Natal Environmental Stressor

• Soft bedding
  – Sleeping on soft bedding: increased SIDS risk 5 X
  – Sleeping on the stomach: increased SIDS risk 2.4 X
  – SIDS victims were 5.4 times more likely to have shared a bed with other children
  – Sleeping on the stomach on soft bedding: increased risk of SIDS 21 times
Cribs for Kids—Safe Sleep

Modifiable Pre- and Post-Natal Environmental Stressor

- Bed Sharing
  - Growing trend: doubled over last decade
  - Reasons: Easier to feed baby and eliminate crying
  - Increased risks of suffocation
Cribs for Kids–Safe Sleep

• Prevention
  – Use a crib or pack-n-play
  – Back to Sleep...ALWAYS!
  – Remove soft bedding, bumpers, stuffed animals from the sleeping area
  – Do not cover baby with a blanket or sheet
  – Do not share bed with baby
    • Consider moving crib into the same room
  – Do not hold baby while in a sleeping position
INFANT CPR

1. Check for Responsiveness
   - Tap shoulder
   - Flick the bottom of the foot

2. Call 9-1-1
   - If ALONE, give 2 minutes of care, then call 9-1-1
   - If an unconscious infant is face-down, roll him or her face-up supporting the head, neck, and back in a straight line

3. Open the Airway
   - Tilt head back slightly, lift chin
INFANT CPR

4 Check for Breathing
- Check for no more than 10 seconds
- Occasional gasps are not breathing

5 Give 2 Rescue Breaths
- Tilt head back and lift the chin up
- Make a complete seal over infant’s mouth and nose
- Blow in for about 1 second to make the chest clearly rise
- Give the 2 rescue breaths, one after the other

If the chest does not rise, retilt the head and give another rescue breath.
If the chest does not rise after retilting the head, give care for unconscious choking.
If there is no breathing – perform CPR
If breathing – maintain an open airway and monitor for changes in condition.
INFANT CPR

After checking for breathing and giving 2 rescue breaths, begin infant CPR

- Check for no more than 10 seconds
- Occasional gasps are not breathing

<table>
<thead>
<tr>
<th>Skill Components</th>
<th>Infant</th>
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<tbody>
<tr>
<td>Hand Position</td>
<td>2 or 3 fingers in center of chest (just below nipple line)</td>
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<tr>
<td>Chest Compressions</td>
<td>About 1 ½ inches deep</td>
</tr>
<tr>
<td>Rescue Breaths</td>
<td>Until chest clearly rises (about 1 second per breath)</td>
</tr>
<tr>
<td>Cycle</td>
<td>30 chest compressions and 2 rescue breaths</td>
</tr>
<tr>
<td>Rate</td>
<td>30 chest compressions in about 18 seconds (at least 100 compressions per minute)</td>
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</table>
INFANT CPR

1. Give 30 Chest Compressions
   - Push hard and fast in the center of the chest
   - 1 ½ inches deep
   - At least 100 compressions per minute

2. Give 2 Rescue Breaths
   - Tilt head back and lift the chin up
   - Make a complete seal over infant’s mouth and nose
   - Blow in for about 1 second to make the chest clearly rise
   - Give the 2 rescue breaths, one after the other

3. Continue Cycle of 30:2
   - Do NOT Stop, unless:
     - Find obvious signs of life
     - AED is ready to use
     - A trained responder or EMS personnel take over
     - You are too exhausted to continue
     - Scene becomes unsafe
Check for Responsiveness

1. Tap shoulder
2. Shout, “Are you okay?”

Call 9-1-1

1. If ALONE, give 2 minutes of care, then call 9-1-1
2. If an unconscious infant is face-down, roll him or her face-up supporting the head, neck, and back in a straight line

Open the Airway

1. Tilt head back slightly, lift chin
4. **Check for Breathing**
   - Check for no more than 10 seconds
   - Occasional gasps are not breathing

5. **Give 2 Rescue Breaths**
   - Tilt head back and lift the chin up
   - Pinch the nose shut, then make a complete seal over child’s mouth
   - Blow in for about 1 second to make the chest clearly rise
   - Give the 2 rescue breaths, one after the other

If the chest does not rise, retilt the head and give another rescue breath
If the chest does not rise after retilting the head, give care for unconscious choking
If there is no breathing – perform CPR
If breathing – maintain an open airway and monitor for changes in condition
After checking for breathing and giving 2 rescue breaths, begin child CPR

- Check for no more than 10 seconds
- Occasional gasps are not breathing

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<tr>
<th>Skill Components</th>
<th>Child</th>
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<td>Hand Position</td>
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**Child CPR**

1. **Give 30 Chest Compressions**
   - Push hard, push fast in the center of the chest about 2 inches deep and at least 100 compressions per minute

2. **Give 2 Rescue Breaths**
   - Tilt head back and lift the chin up
   - Pinch the nose shut then make a complete seal over the child’s mouth
   - Blow in for about 1 second to make the chest clearly rise
   - Give the 2 rescue breaths, one after the other

3. **Continue Cycle of 30:2**
   - Do NOT Stop, unless:
     – Find obvious sign of life
     – AED is ready to use
     – Another trained responder or EMS personnel take over
     – You are too exhausted to continue
     – Scene becomes unsafe
AED on a Child and Infant
(Younger than 8 years or weighing less than 55 pounds)

1. Turn on AED (pediatric)
   • Follow the voice and/or visual prompts

2. Wipe bare chest dry

3. Attach Pads
   • 1 pad – Right side of the chest below the clavicle
   • 1 pad - Left side of the chest below the nipple line
   • If pads risk touching each other, use the front-to-back pad placement

4. Plug in Connector, if necessary

5. Stand clear
   • Do not touch infant or child
AED on a Child and Infant
(Younger than 8 years or weighing less than 55 pounds)

**Analyze Heart Rhythm**
- Push the “analyze” button, if necessary
- Let the AED analyze the heart rhythm

**Deliver Shock**
- If a shock is advised:
  - Make sure no one, including you, is touching the child or infant
  - Say, “Everyone stand clear”
  - Push the “shock” button

**Perform CPR**
- After delivering the shock, or if no shock is advised:
  - Perform about 2 minutes (or 5 cycles) of CPR
  - Continue to follow the prompts of the AED
# Foreign Body Airway Obstruction

## Causes of Choking

<table>
<thead>
<tr>
<th>Non-Food</th>
<th>Food</th>
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<tbody>
<tr>
<td>Toys</td>
<td>Raw vegetables</td>
<td>AAP: 5 years</td>
</tr>
<tr>
<td>Coins</td>
<td>• AAP: requires chewing with a grinding motion, which is not</td>
<td>• Hard, gooey, or sticky candy</td>
</tr>
<tr>
<td>Marbles</td>
<td>developed until 4 years</td>
<td>• Grapes</td>
</tr>
<tr>
<td>Marker caps</td>
<td>• Peanuts</td>
<td>• Popcorn</td>
</tr>
<tr>
<td></td>
<td>• AAP: 7 years</td>
<td>• Chewing gum</td>
</tr>
<tr>
<td></td>
<td>• Hot dogs &amp; carrot sticks</td>
<td>• Vitamins</td>
</tr>
<tr>
<td></td>
<td>• AAP: Must be chopped into small pieces no larger than ½ inch</td>
<td></td>
</tr>
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Foreign Body Airway Obstruction

Signs of choking

- Coughing, forcefully or weakly
- Clutching the throat
- Inability to cough, speak, cry, or breathe
- Making high-pitched noises while inhaling or noisy breathing
- Panic
- Bluish skin color
- Losing consciousness if blockage is not removed
Foreign Body Airway Obstruction

Conscious Choking Infant
Cannot Cough, Cry, or Breathe

1. Give 5 Back Blows
   - Give firm back blows with the heel of one hand between the infant’s shoulder blades
     - Keep the head lower than the chest
     - Support the head and neck

2. Give 5 Chest Thrusts
   - Place two or three fingers in the center of the infant’s chest just below the nipple line and compress the breastbone about 1 ½ inches
     - Keep the head lower than the chest, support the head and neck

3. Continue Care
   - Continue sets of 5 back blows and 5 chest thrusts until the:
     - Object is forced out
     - Infant can cough forcefully, cry, or breathe
     - Infant becomes unconscious

4. If infant becomes UNCONSCIOUS:
   - Call 9-1-1, if not already done
   - Lower the infant on a firm, flat surface, and give care for an UNCONSCIOUS choking infant
If at any time the chest does not rise:

1. Give another rescue breath
   - Retilt the head and give another breath

2. Give Chest Compressions
   - If the chest still does not rise, give 30 chest compressions

3. Look for and Remove Object if seen

4. Give 2 rescue breaths
   - If rescue breaths do not make the chest rise, repeat steps 2 through 4
   - If chest clearly rises, check for breathing and give care based on condition found
Foreign Body Airway Obstruction

Conscious Choking

C H I L D

Cannot Cough, Speak, or Breathe

1. Stand or kneel behind the child
2. Give 5 Back Blows
   - Bend the child forward at the waist and give 5 back blows between the shoulder blades with the heel of one hand
3. Give 5 Abdominal Thrusts
   - Place a fist with the thumb side against the middle of the child’s abdomen, just above the navel
   - Cover your fist with your other hand
   - Give 5 quick, upward abdominal thrusts
4. Continue Care
   - Continue sets of 5 back blows and 5 abdominal thrusts until the:
     - Object is forced out
     - Child can cough forcefully or breathe
     - Child becomes unconscious
5. If child becomes UNCONSCIOUS:
   - Call 9-1-1, if not already done
   - Carefully lower the child to the ground and give care for an UNCONSCIOUS choking child
If at any time the chest does not rise:

1. Give another rescue breath
   • Retilt the head and give another breath

2. Give Chest Compressions
   • If the chest still does not rise, give 30 chest compressions

3. Look for and Remove Object if seen

4. Give 2 rescue breaths
   • If rescue breaths do not make the chest rise, repeat steps 2 through 4
   • If chest clearly rises, check for breathing and give care based on condition found
Call First vs. Care First (when you are alone)

- **Call First**
  - Call 9-1-1 before giving care
  - Generally situations are likely to be cardiac emergencies
    - Any adult of child about 12 years of age or older who is unconscious
    - A child or infant who you witnessed suddenly collapse
    - An unconscious child or infant known to have heart problems

- **Care First**
  - Give 2 minutes of care, then call 9-1-1
  - Generally situations are likely related to breathing emergencies
    - An unconscious child (younger than about 12 years of age) who you did not see collapse
    - Any drowning victim
Useful Links

www.cdc.gov

www.aap.org

www.pasafekids.org

www.safekids.org

www.cdc.gov

www.cribsforkids.org

http://thebatterycontrolled.com

www.redcross.org

www.redcross.org

www.heart.org

www.cpinpa.org