“Pass the Bronchial Tube”
Relay Race
Ages 5-12

Activity Objective:
A relay race to understand the anatomy and changes within a bronchial tube. Teamwork will allow children to build (and then dismantle) a simulated bronchial tube in a fun and active race. It also illustrates the respiratory function involved in an asthma episode.

Instructions:
- Two teams are established to compete in the The Bronchial Tube Relay Race.
- Materials that will build and dismantle the “Bronchial Tube” are placed along different stations (see “Various Stations” listed on page 24) that may be set up in a line, in a circle or in a random pattern outside. This will simulate an asthma episode and the events that occur within an asthma episode (and those following medication).
- Teams choose members to be posted at each station, along with a starting runner.
- At each station explanations of the representative asthma action are given.
- Group leader yells “go,” and the first runners from each team go to the first station to pick up the tube and run it to the next station. Example: This cardboard tube represents a bronchial tube.
- At the next station, a relay runner is waiting. Runner #1 takes 4 rubber bands and puts them tightly around the outside of the “tube” representing constriction. After the tube is “constricted,” it is handed to Runner #2 who goes to the next station.
- At the Inflammation station, Runner #2 will stuff cotton and Play-Doh® (or comparable material) into the tube until it is full (to show the effects of inflammation and mucus) and hand it to Runner #3.
- At the Medication station, Runner #3 will call out the name of the medication that they (personally) use, and its effects ie, “I use ______________ and it is a bronchodilator!” After this, Runner #3 hands the tube to waiting Runner #4 who goes on to the next area where the tube is then relieved of asthma symptoms.
- Reversing the effects of an asthma episode, Runner #4 will completely unstuff the tube and then hand it to waiting Runner #5.
- Runner #5 goes to next station where the rubber bands are removed and the tube is handed to Runner #6 who will then take the clear tube across the finish line.

(continued)
The various stations include:

<table>
<thead>
<tr>
<th>Start:</th>
<th></th>
<th>Station #1</th>
<th>Constrict</th>
<th>Smooth muscle bands</th>
<th>Wrap rubber bands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Station #2</td>
<td>Create</td>
<td>Inflammation &amp; mucus</td>
<td>Stuff cotton balls &amp; Play-Doh®</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Station #3</td>
<td>Medication</td>
<td>Name your Rx and its role</td>
<td>Call out the meds you use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Station #4</td>
<td>Decrease</td>
<td>Inflammation &amp; mucus</td>
<td>Remove cotton balls &amp; Play-Doh®</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Station #5</td>
<td>Expand</td>
<td>Smooth muscle bands</td>
<td>Remove rubber bands</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Station #6</td>
<td>Return</td>
<td>Bronchial tube to normal</td>
<td>End race, relieve asthma</td>
</tr>
</tbody>
</table>

*NOTE: Stations can be combined to accommodate fewer participants if needed.*

**Materials Needed:**
- Cardboard toilet paper tubes
- Rubber bands
- Cotton balls
- Play-Doh® or similar material that might be goopy and can simulate mucus
- Baseball bases or hula hoops, if available, can be used to clearly mark the location of each relay station and finish line. Stations should be placed a reasonable distance apart to facilitate an active, outdoor race.