

# ALLERGIES

## Important information:

- ~Can have allergies to pollen, foods, dusts, mold spores, chemicals, insect venom & medicines (called *allergens*)
- ~Can result in hives or severe reactions such as swelling in the throat
- HISTAMINES:** chemicals that stimulate mucus and fluid production in an affected area (cause the sneezing, runny nose & itchy/watery eyes)

## Diagnosing Allergies:

### Common Allergy tests

- 1) Blood test- checks for antibodies
- 2) food elimination test - person feels “better” if they don’t have that food
- 3) skin test - area is scratched to see if it will turn red when a small amount of allergen is applied (inflammatory response)

## Treating Allergies:

- 1) Avoid the allergen
- 2) Medication including antihistamines
- 3) When severe: may receive immunotherapy (allergy shots)

# ASTHMA

## Important information:

**DEFINITION:** an inflammatory condition in which the small airways in the lungs become narrowed, causing difficulty in breathing from bronchial walls tightening or extra mucus production

**\*\*Can come from allergic reactions**

- More than 17 million people in the US have asthma (5.000 die/year)
- Develops at any age ( $\frac{1}{3}$  diagnosed before age 18)
- Triggers = air pollution, pet dander, tobacco smoke, microscopic mold, pollen & dust mites
- Can be life threatening

## Managing Asthma:

- 1, Monitor the Condition (shortness of breath, chest tightness or pain, coughing/sneezing)
2. Manage the environment (avoid smoke, eliminate rugs/carpets, wash bedding frequently)

3. Manage stress (can be a trigger); relaxation/breathing techniques
4. Take medication (inhalers relax & widen the respiratory passages - bronchodilators)

# DIABETES

## Important information:

**DEFINITION:** a chronic disease that affects the way that the body cells convert food into energy

- ~ no cure
- ~ pancreas fails to produce enough insulin (hormone that helps glucose enter a body cell) -OR- body cells don't respond properly to the insulin produced
- ~ Diagnosed through blood test
- ~ can result in heart disease & stroke
- ~ leading cause of kidney failure, limb amputation & blindness in adults

## Symptoms:

- ~ frequent urination
- ~ excessive thirst
- ~ weight loss
- ~ sudden vision changes
- ~ tingling/numbness in feet
- ~ sores that are slow to heal

## Type 1 Diabetes:

- ~ autoimmune disease - can develop at any time
  - Body stimulates an immune response, destroying the insulin producing cells of the pancreas; glucose builds up in the blood (causing high blood sugar & does not go into the cells (starving them of energy)
- ~ no known cause
- ~ requires daily dose of insulin

## Type 2 Diabetes:

- ~ Body is unable to make enough insulin or use insulin properly
  - ~ pancreas makes it, body just doesn't use it efficiently
- ~ generally found in older individuals who are inactive & have a greater prevalence of obesity
- ~ 90-95% of diabetics in the US are Type 2

# ARTHRITIS

## Important information:

- ~ more than 100 disease that cause pain & loss of movement at the joints
- ~ one of most common medical problems in the world
  - ~ #1 cause of disability in the US
  - ~ 1/6 people in US suffer from it
- ~ more common in older adults but can affect anyone

## Osteoarthritis:

- DEFINITION:** a disease in which cartilage breaks down in the joints
- ~ over time, cartilage wears completely away & bones rub each other
  - ~ one of most common types
    - ~ 1/2 of all arthritis cases

## Rheumatoid Arthritis:

- DEFINITION:** a disease characterized by the debilitating destruction of the joints due to inflammation
- ~ an autoimmune disease - NO CURE
  - ~ Joint pain. Swelling, inflammation & stiffness
  - ~ affects mainly hands, feet, shoulders, elbows, neck, knees, hips & ankles
  - ~ can be controlled with medication

# PHYSICAL CHALLENGES

**Disability:** any physical or mental impairment that limits normal activities such as sight, hearing, walking or speaking

## Important information:

- ~ most common type of physical challenges affects person's ability to move easily
- ~ disability affecting senses or making it harder to move

## Sight Impairment:

- ~ moderate (glasses)

- ~ severe (blindness)
- ~ **macular degeneration**: disease in which the retina degenerates (breaks down);
  - \*leading cause of blindness 55+
- ~ **Glaucoma** - disease of optic nerve of the eye
- ~ **Cataracts** - a clouding over the lense of the eye
  - \*\*Early detection can prevent blindness or slow it's progress

**Hearing Impairment:**

- ~ profound deafness is hearing loss so severe that a person affected cannot benefit from hearing aids
- ~ hereditary or injury related
- ~ often in older adults
- ~ gradual until total hearing loss

**Motor Impairment:**

- ~ body's range of motion is affected by the brain or disorder
- ~ physical therapy may help
- ~ use of wheelchairs if no longer able to move

**Americans with Disabilities Act:** laws requiring all public places be wheelchair accessible

# GENETIC DISORDERS

Read the article [10 Most Common Genetic Disorders](#)