1a Health & Hygiene (H&H)
Disease and Prevention

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5 minutes	Attendance, Breath of Arrival, and Reminders
15 minutes	Deltoid
40 minutes	Lecture

60 minutes total class time

1a Health & Hygiene (H&H) Disease and Prevention

Class Reminders

Assignments:

- 3a Student Handbook Review Questions (A: 115-118)
- 4a Autobiography and Photo (B-4) – *email to your instructor* **AND** *tims@tlcschool.com*
- 7a Written Exam Review Questions (A: 119-130)

Quizzes:

- 6a Kinesiology Quiz (A-73, and A: 75-80)
  - 20 multiple-choice questions in 20 minutes
  - Study terms on page A-51 and
  - AOIs for deltoid, traps, lats, teres major, rhomboids, triceps, and erectors

Preparation for upcoming classes:

- 2a Kinesiology: Names and Locations of Bones and Posterior Muscles
  - Trail Guide: Trapezius
  - Salvo: Pages 416-417
  - Packet E: 17
  - RQ Packet A: 120 and A 136

- 2b H&H: Tools of the Trade
  - Salvo: Chapter 3
  - Packet F: 1-16
  - RQ Packet A: 121-122

Classroom Rules

Punctuality - everybody's time is precious

- Be ready to learn at the start of class; we'll have you out of here on time
- Tardiness: arriving late, returning late after breaks, leaving during class, leaving early

The following are not allowed:

- Bare feet
- Side talking
- Lying down
- Inappropriate clothing
- Food or drink except water
- Phones that are visible in the classroom, bathrooms, or internship

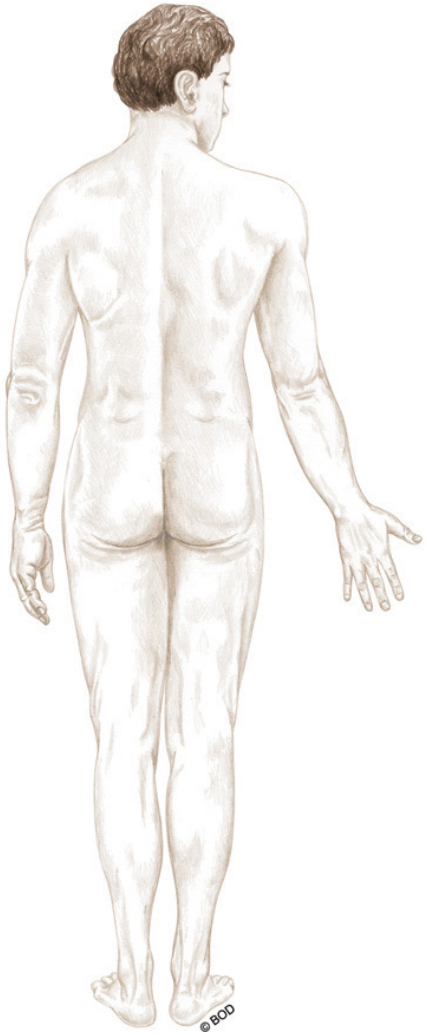
You will receive one verbal warning, then you'll have to leave the room.

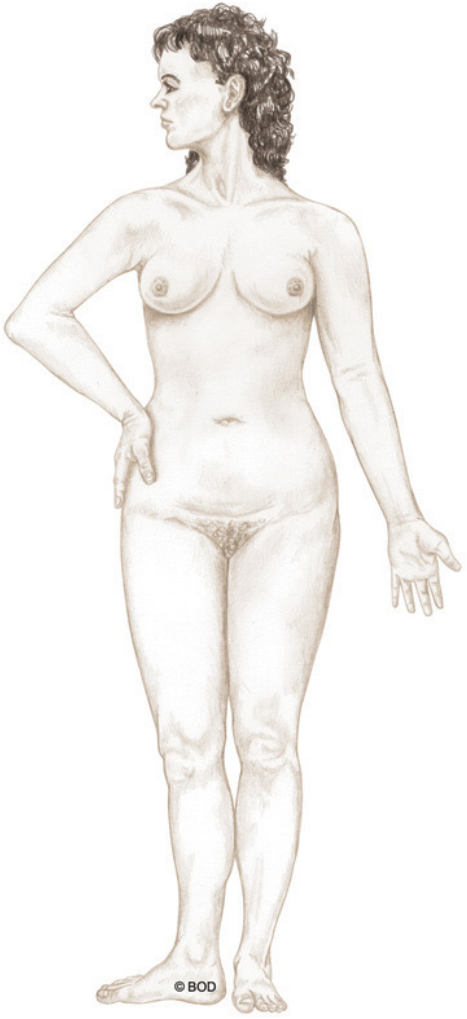
The Trail Guide to the Body

Muscles of the Human Body

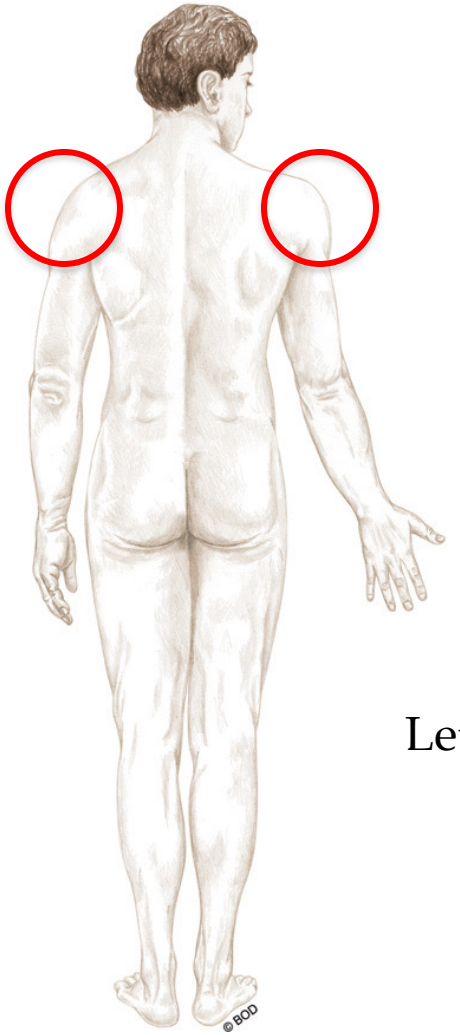
Please turn to page 67 . . .

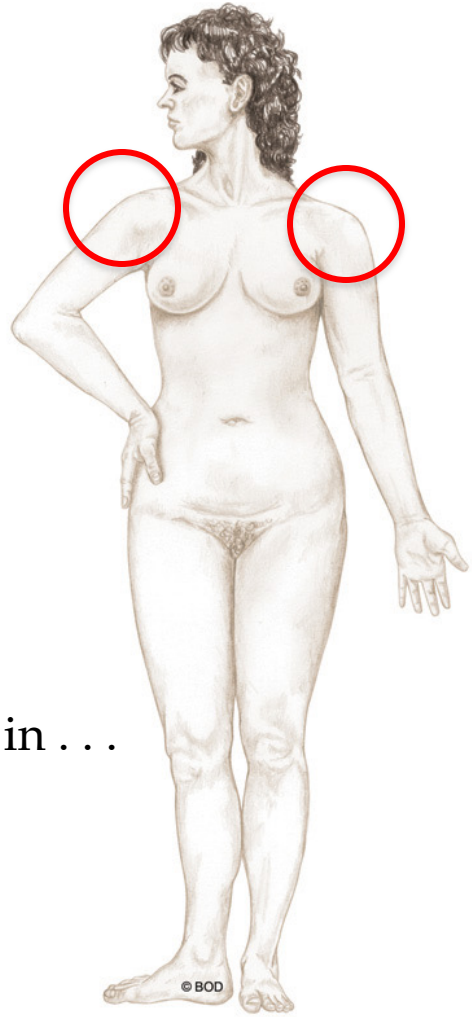
Where are the deltoid muscles located?





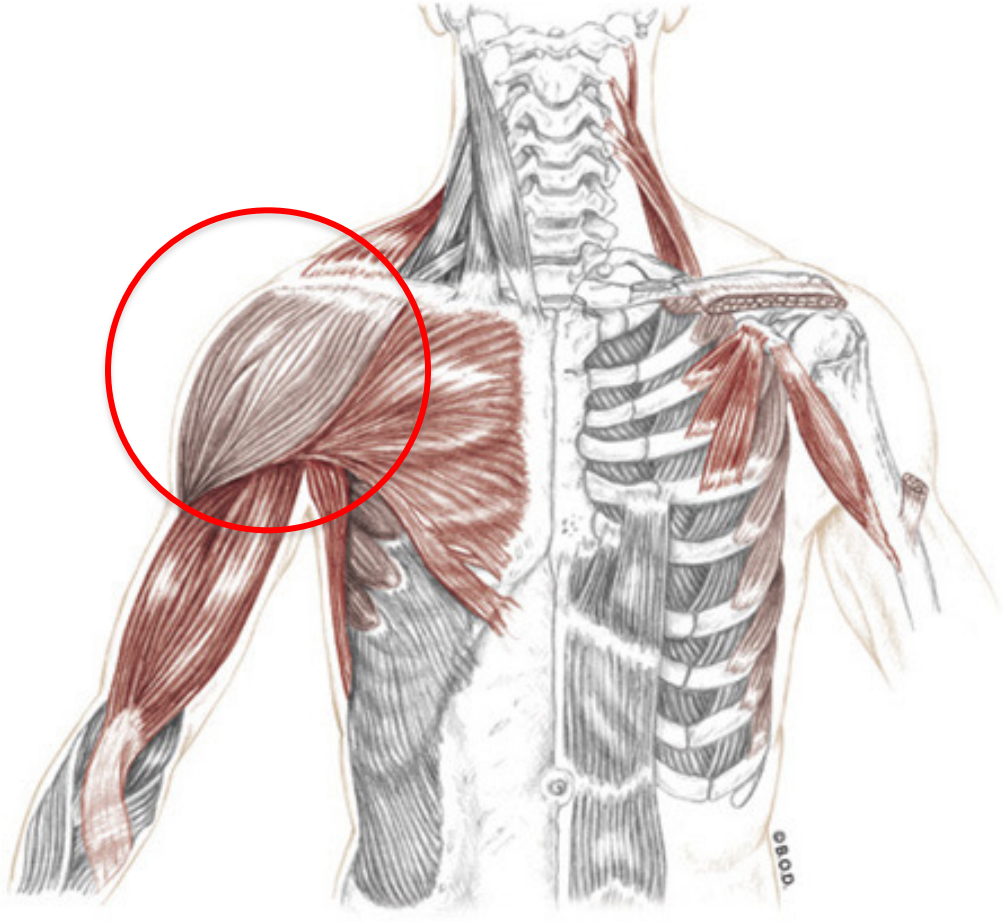
The deltoid muscles are located on the caps of the shoulders!





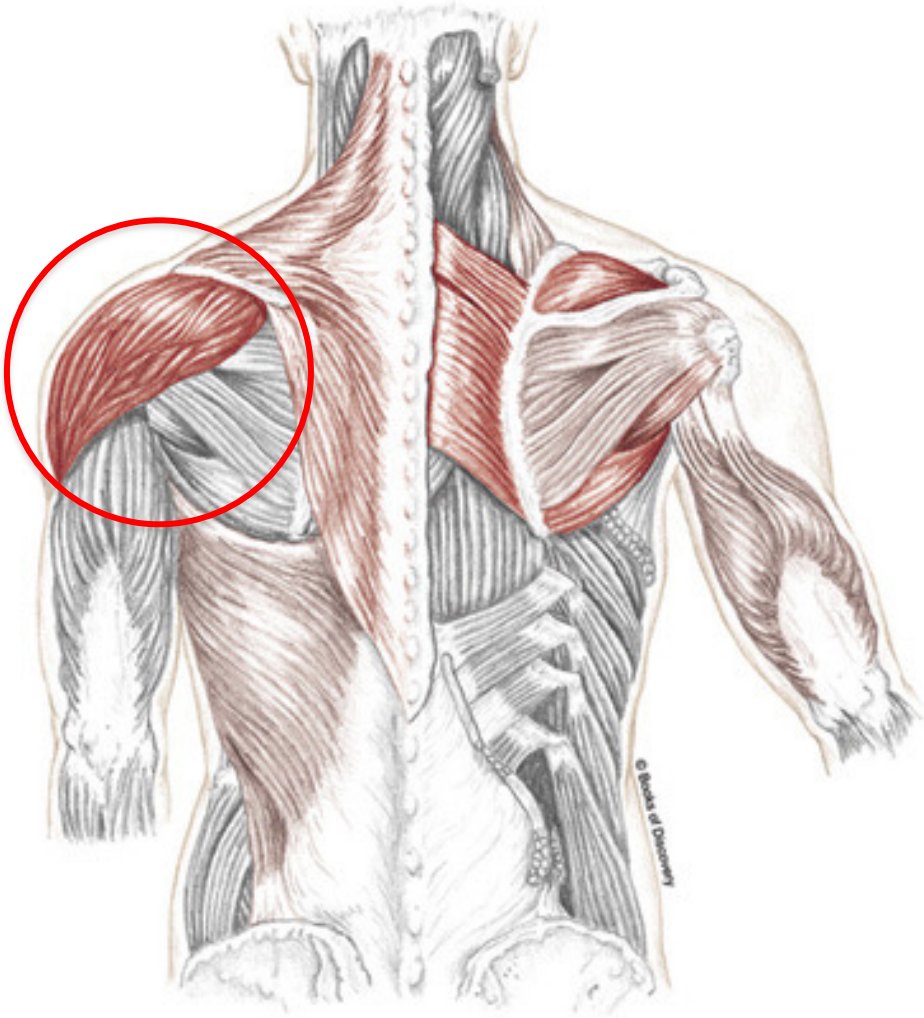
Let's zoom in . . .

Anterior view of the deltoid



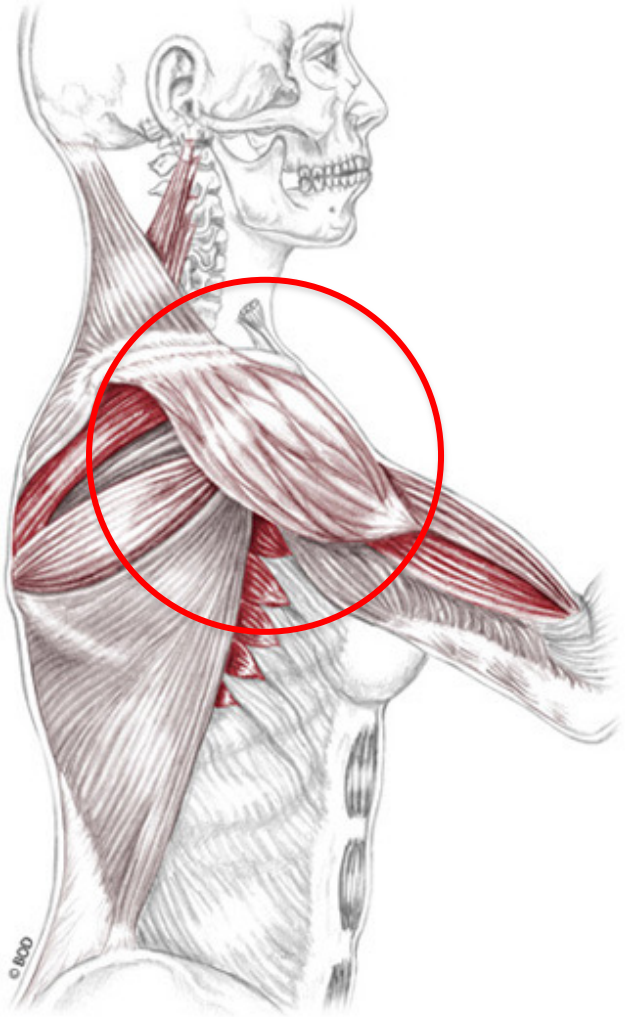
Now let's take a look at deltoid from the back . . .

Posterior view of the deltoid



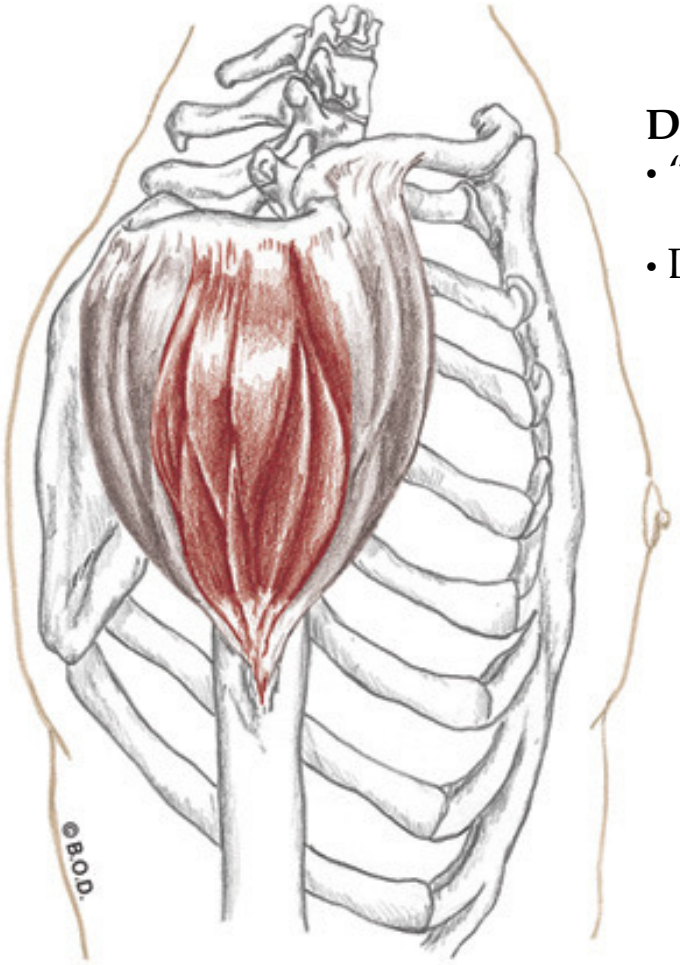
And next a view from the side . . .

Lateral view of the deltoid



Next, a view of deltoid by itself . . .

What does deltoid mean?



Lateral View

Deltoid

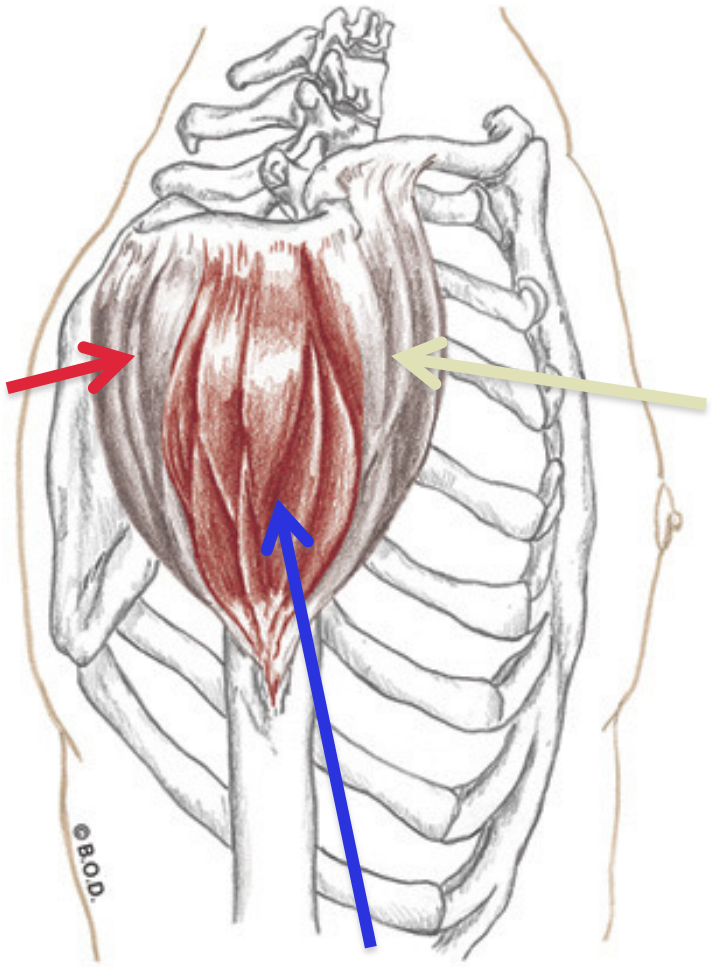
- "Triangle-shaped"
- Delta (Δ) is the capital letter D in the Greek alphabet

The deltoid fibers can be divided into three segments:

Posterior fibers

Middle fibers

Anterior fibers



Lateral View

Deltoid, Trail Guide page 67

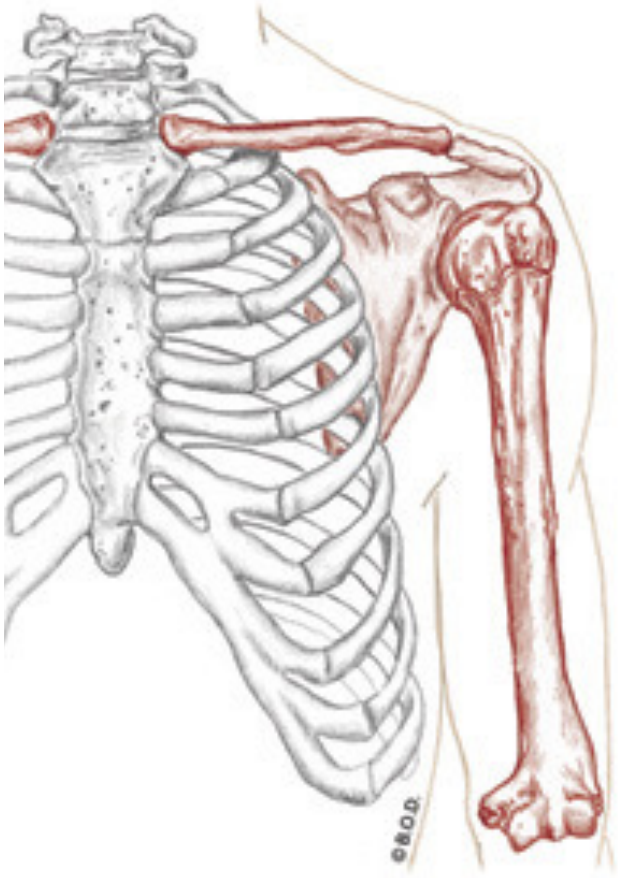
A All fibers:
Abduct the shoulder (G/H joint)

Anterior fibers:
Flex the shoulder (G/H joint)
Medially rotate the shoulder (G/H joint)
Horizontally adduct the shoulder (G/H joint)

Posterior fibers:
Extend the shoulder (G/H joint)
Laterally rotate the shoulder (G/H joint)
Horizontally abduct the shoulder (G/H joint)

O Lateral one-third of clavicle
Acromion
Spine of scapula

I Deltoid tuberosity



Anterior View

Deltoid

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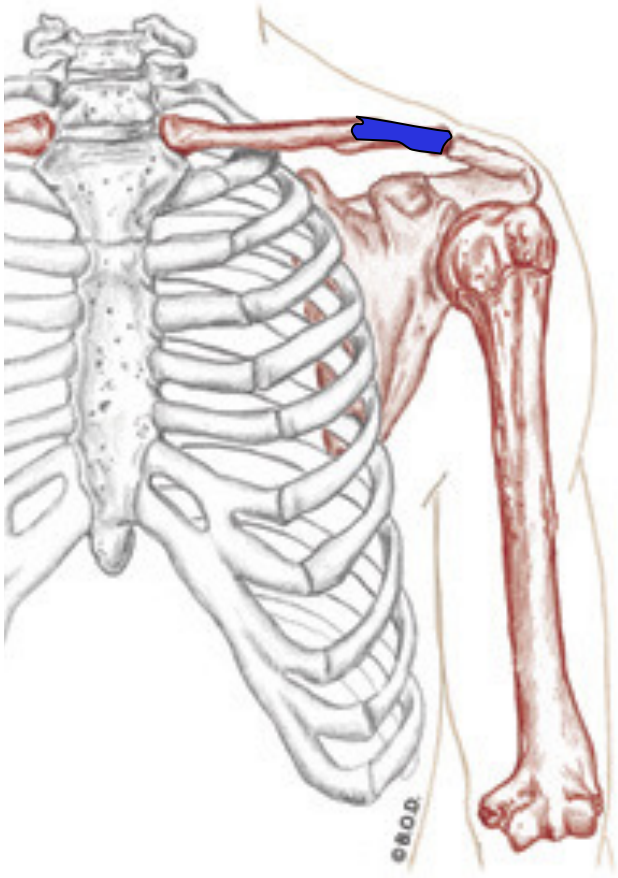

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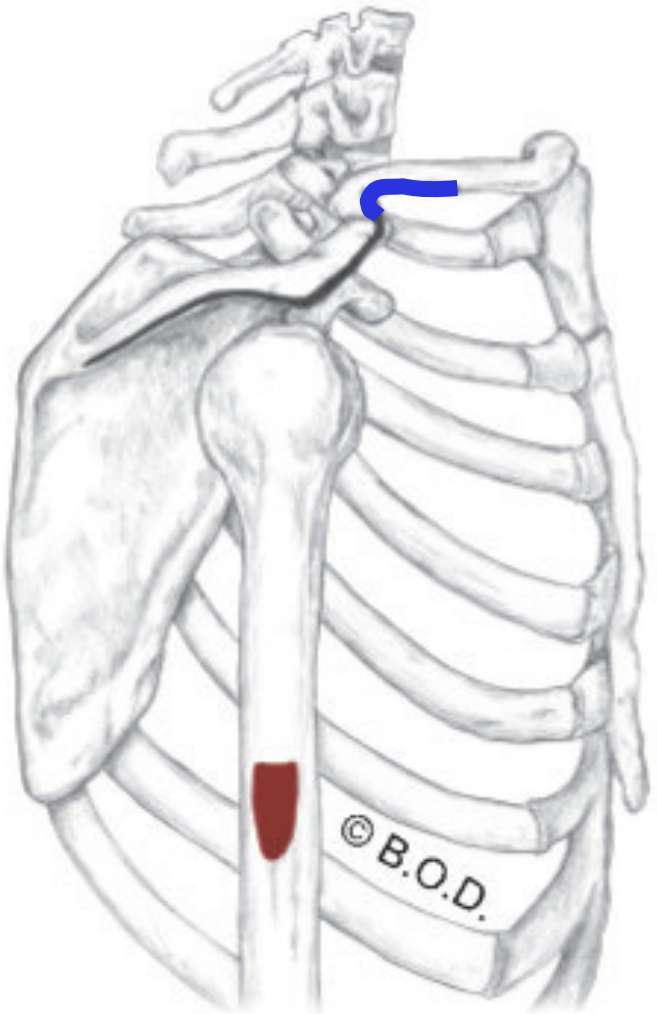

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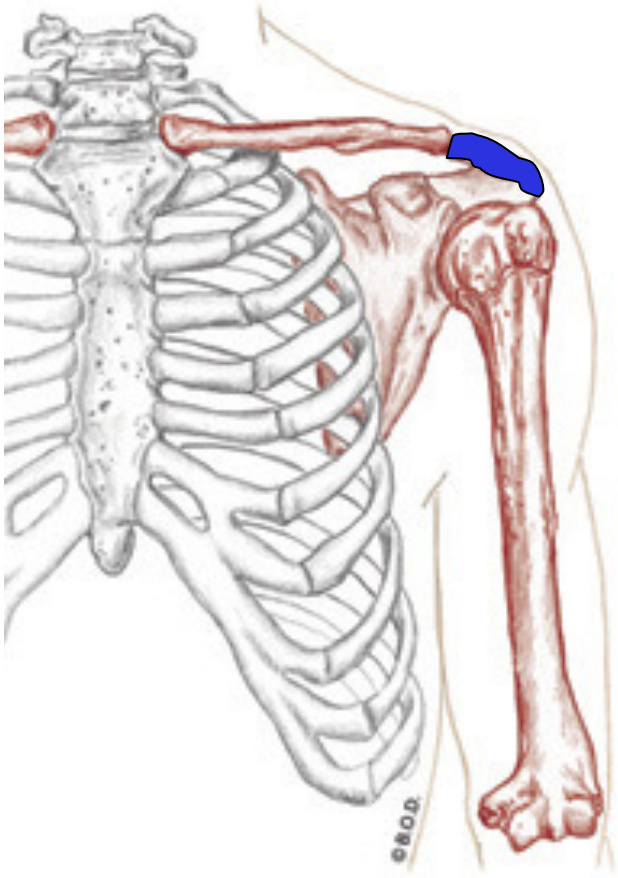

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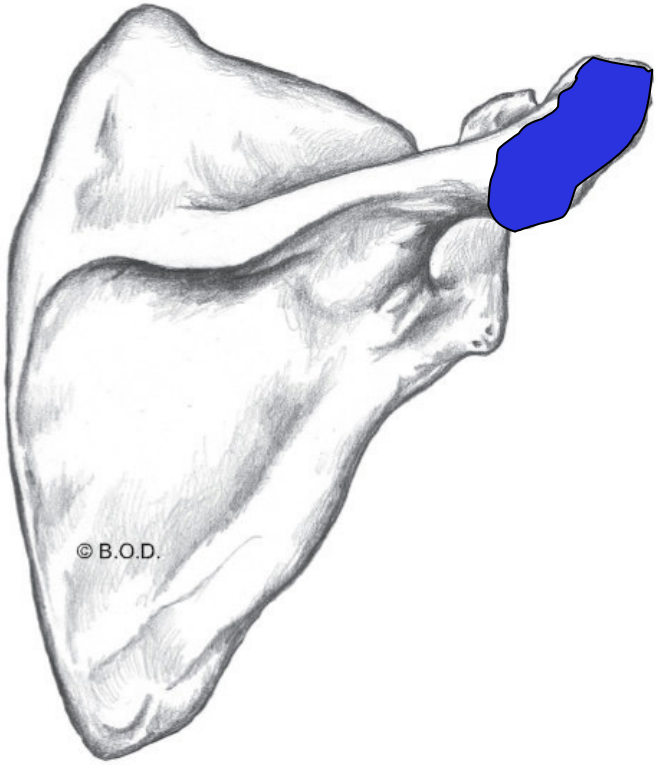

Posterior View

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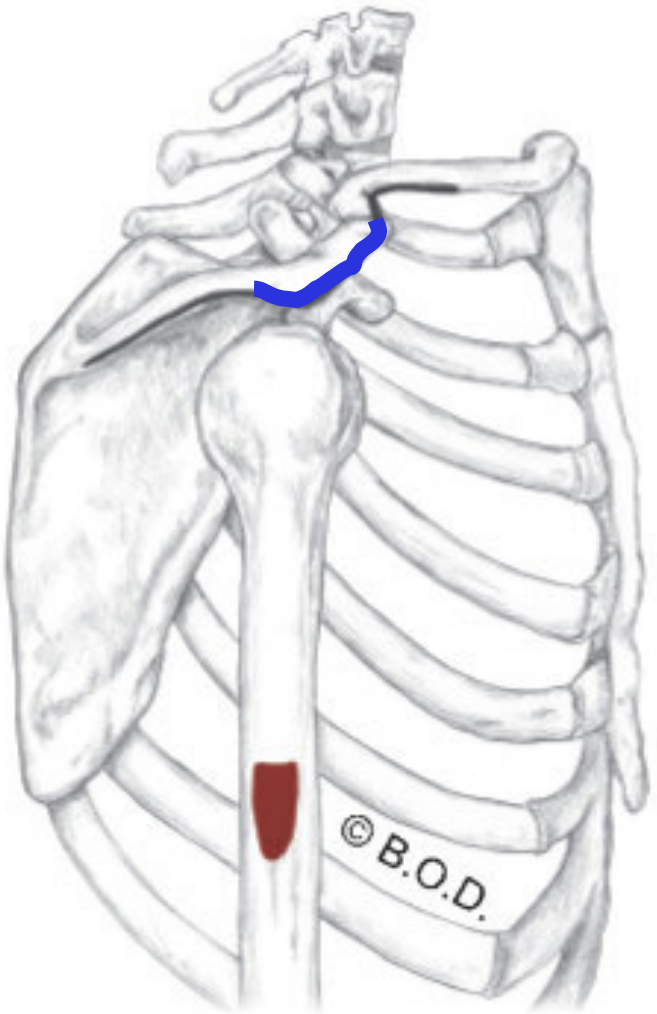

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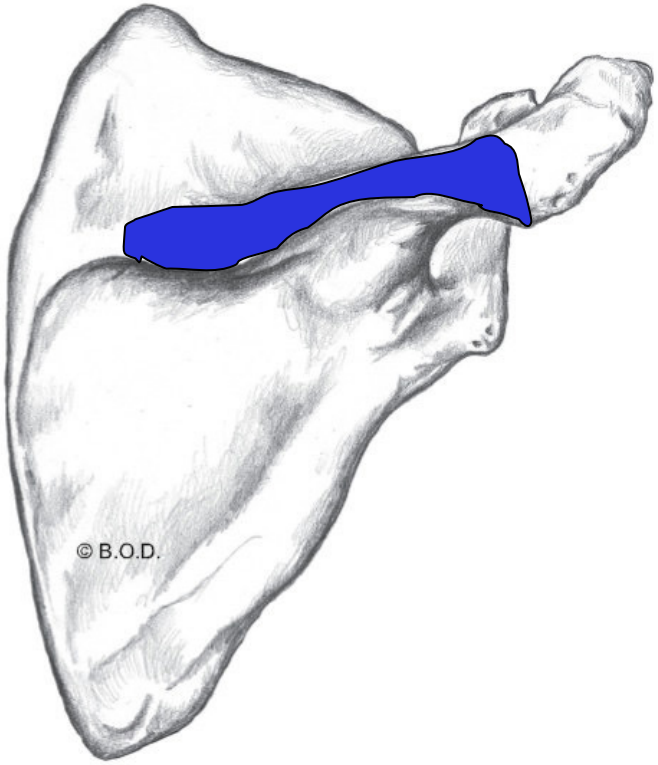

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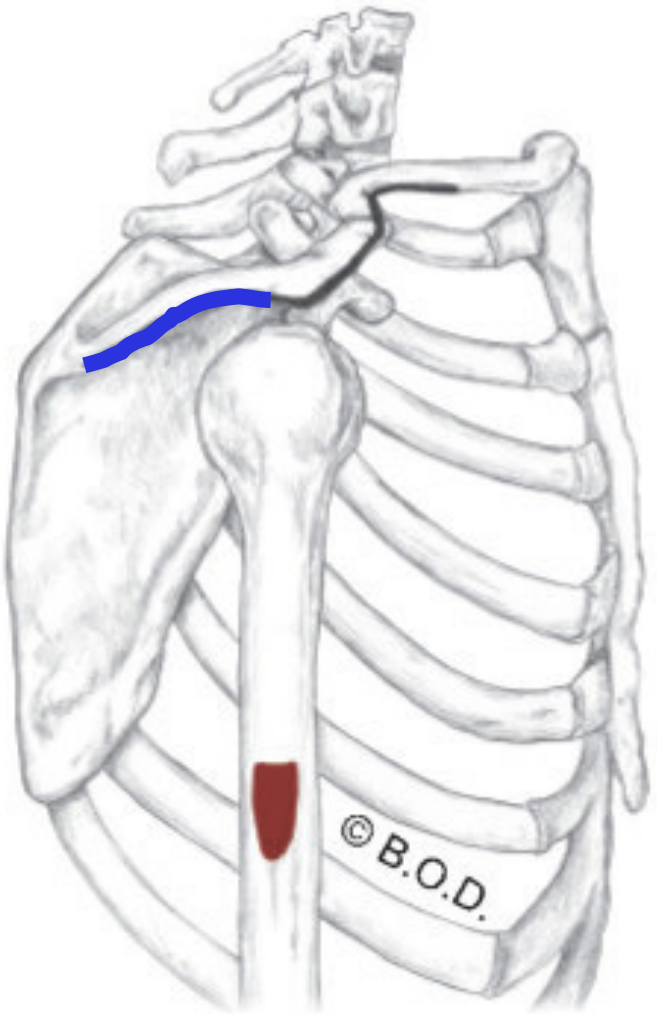

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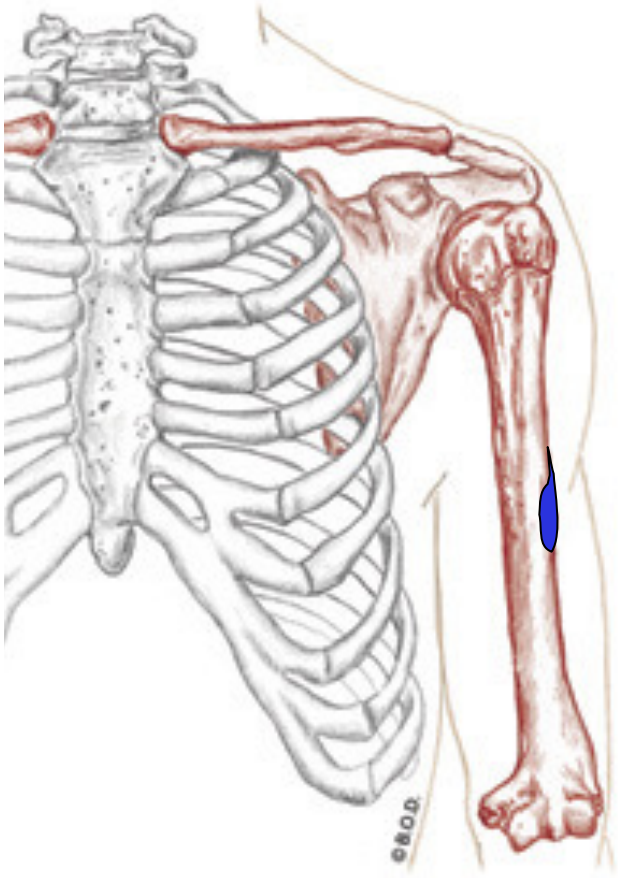

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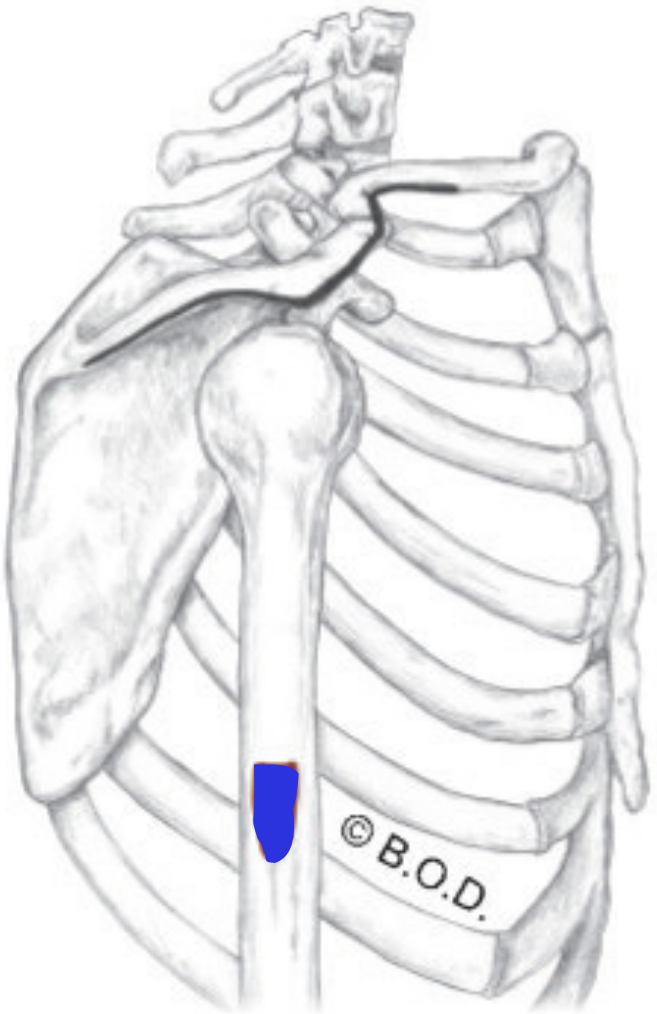

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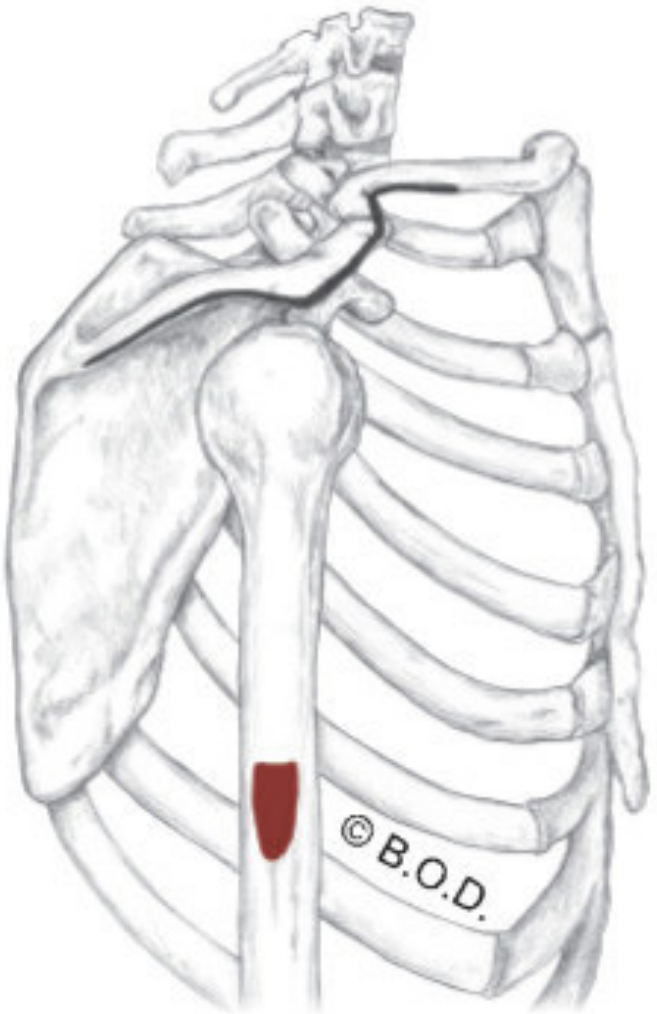
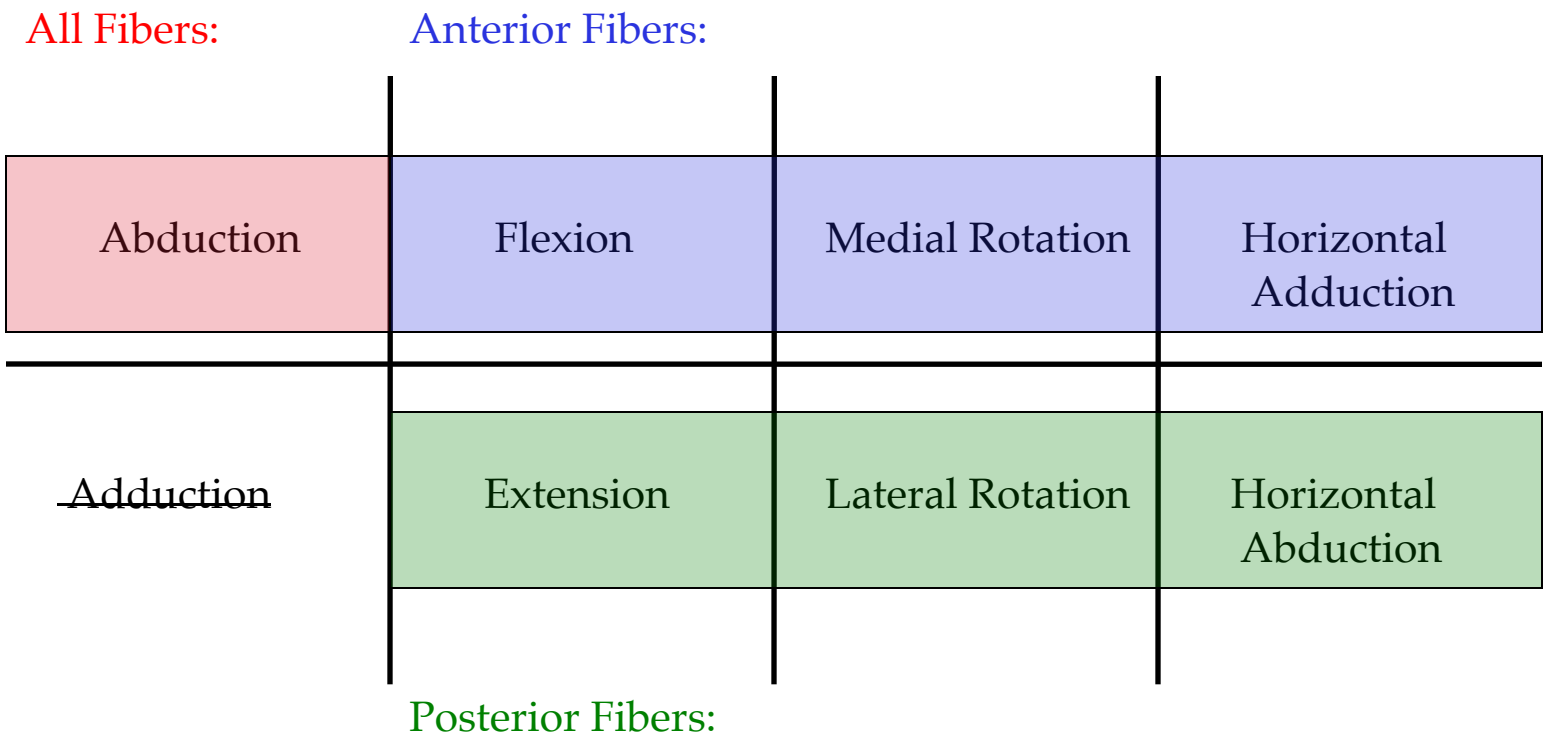


Lateral View

Deltoid: 7 actions
(consider drawing this on A-52!)



1a Health & Hygiene (H&H)
Disease and Prevention
H-37

The information in 1a and 1b, will not appear on our tests unless it is repeated in a future class (the exception is kinesiology-deltoid)

Introduction

Massage is one of the safest, least intrusive, and most effective treatments for pain and discomfort in health care and self-care.

However, clients are susceptible to infection and injury from massage, and they may present with contraindications, or experience medical emergencies such as hypoglycemia or a heart attack.

To reduce the risk of infection, a system of infection control is needed to protect clients and massage therapists and to minimize disease transmission.

Minimizing Disease Transmission

- Handwashing, including nails
- Disinfecting contaminated linens, surfaces, and reusable objects (like your table, lubricant container, etc.)

Hippocrates, the father of Western medicine, is frequently quoted as saying physicians should “do no harm”. Likewise, massage therapists across the globe must adopt policies of impeccable cleanliness and adherence to standard precautions to safeguard against infection.

Definitions

Disease is a condition of abnormal function involving anatomic structures or body systems. Diseases are characterized by a recognizable set of signs and symptoms and can be caused by heredity, infection, diet and lifestyle, and environmental factors.

Pathology is the study of disease.

Syndrome is a group of signs and symptoms that occur together and characterize a particular condition, suggest an underlying disease, or increase the risk of disease development.

Definitions

Prognosis is a prediction of how the disease will progress and the chances of recovery based on the person's condition and the usual course of disease as observed in similar situations.

Signs are objective evidence obvious to someone other than the affected individual. Signs can be observed and measured. For example, fever, swelling, rashes, high blood pressure, pulse, etc.

Symptoms are subjective evidence perceived by an individual, and examples include stomachache, headache, nausea, pain, anxiety, etc.

Definitions

Etiology means the causes or origins of disease.

Idiopathic is a disease that does not have a known cause.

Complications are conditions that arise as a disease progresses.

Epidemiology is the study of occurrence, distribution, and transmission of diseases in human populations.

Definitions

An **endemic disease** is one that is found regularly in people within local geographic regions or specific races of people. For example, malaria, which is more common in certain parts of Africa.

Epidemics are reported occurrences of disease that affect a large number of people at the same time within a geographic region, but, unlike a endemic, epidemics eventually subside. For example, in 2010, California had a whooping cough/pertussis epidemic.

Pandemics are reported occurrences of disease that affect a large number of people in many geographic regions, often worldwide. For example, HIV infection.

Definitions

Morbidity has 2 definitions.

1. It indicates the number of individuals affected by a particular disease within a certain population or geographic region. For this definition, examples are the numbers of elderly citizens with Alzheimer disease and the number of Native Americans who have type 2 diabetes.

2. The disease state. Alzheimer disease and type 2 diabetes are each examples of morbidities.

Which definition of morbidity is being used is determined by its context.

Definitions

A person can have several morbidities. When this occurs, the person is said to have **comorbidities.** An example of a comorbid disease is a person diagnosed with diabetes and later diagnosed with high blood pressure.

Mortality indicates the number of deaths within a certain population or geographic region.

Incidence is the number of new cases in a particular population during a specific period, usually a calendar year.

Prevalence refers to the number of all existing cases (new and old) of a disease within a particular population.

History of Disease (short stories)

Early humans had shorter life spans, but not because of epidemics: their primary problem was just finding enough food to eat.

Some lived in small groups and moved frequently. They had few problems with accumulating waste or contaminated water or food.

The shift from the hunter-gatherer mode of living to an agricultural model provided a more secure supply of food.

Domesticated animals provided food and labor but they also carried diseases that could be transmitted to humans and additional waste.

History of Disease (short stories)

Living in larger groups and staying in the same place meant more opportunities for the transmission of diseases.

Garbage and waste accumulated, and rodents and insects were attracted to these settlements, providing more sources of disease.

History of Disease (short stories)

Leprosy was the first or one of the earliest recorded diseases, spread by humans departing to other countries. Hundreds of thousands of people around the world still suffer from leprosy, which attacks a person's skin and nerves.

The bubonic plague (1347-1700s) was caused by the bacteria that lived in the intestines of fleas. It was transmitted to rats by flea bites. It spread to humans who would experience headache, high fever, delirium, and sometimes death.

History of Disease (short stories)

Typhoid ‘Mary’ Mallon (1869-1938) worked in various domestic positions for families prior to settling into her career as a cook.

As a healthy (asymptomatic) carrier of salmonella typhi, her nickname had become synonymous with the spread of disease, as many were infected due to her denial of being ill.

History of Disease (short stories)

In 1907, about 3,000 New Yorkers had been infected by salmonella and it's thought that Mary was the reason for the outbreak. Immunization was not developed until 1911, and antibiotic treatment was not available until 1948.

If Mary Mallon had washed her hands diligently (most did not at this time), she may have never infected so many people.

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Disease and Prevention