

# AP PREP

## Medical Geography

## Rural Geography

Fill in the blanks to complete the definition or sentence. Note: All of the following information in addition to your reading is important, not just the blanks you fill in.

### The Distribution of Health

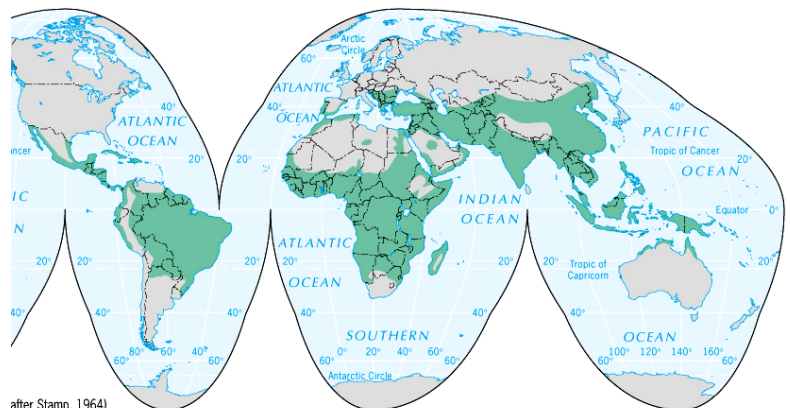
- \_\_\_\_\_ geography - the study of health in geographic context.
- \_\_\_\_\_ typically have source areas (cores), identifiable diffusion routes, and affect clusters of populations (regions).
- Regions where \_\_\_\_\_ prevails are also areas of poverty, inadequate medical services, poor sanitation, and sub-standard housing.
- \_\_\_\_\_ (IMR) - reflects the overall health of a society (diarrhea & malnutrition are leading killers of children worldwide); 27 countries still have IMRs > 100.
- \_\_\_\_\_ (CMR) - deaths b/w 1-5 yrs, still high in much of Africa & Asia; kwashiorkor = condition related to a lack of protein early in life; marasmus = inadequate protein & insufficient calories; affect millions of children - mostly in the LDCs (least developed nations).
- \_\_\_\_\_ - reported as very low in areas with high IMRs and CMRs; women almost always outlive men; a person who has survived beyond childhood is likely to live well beyond life expectancy.
- "\_\_\_\_\_ " of populations - 600 million people age 60 and older worldwide; the number is increasing - mostly in the MDCs (most developed nations).

### The Distribution of Disease

- **There are three major types of diseases:**
  1. \_\_\_\_\_ - result from an invasion of parasites; 65% of all illnesses.
  2. \_\_\_\_\_ (degenerative) - diseases of longevity or age; long-term deterioration.
  3. \_\_\_\_\_ (inherited) - traced to genetic factors; chromosomes & genes.
- **More terms & definitions:**
  - \_\_\_\_\_ - when an outbreak affects a large number of people in a region (may be associated with a large number of deaths).
  - \_\_\_\_\_ - when the outbreak spreads around the world (e.g. influenza - 1918).
  - \_\_\_\_\_ - used to describe a disease that is particular to a region.
  - \_\_\_\_\_ - organisms (e.g. worms, insects, viruses, bacteria,...) that infect people (hosts).
  - \_\_\_\_\_ - when a population contains a large number of hosts.
  - \_\_\_\_\_ disease - when a disease is carried from one host to the next by an intermediate host;
  - \_\_\_\_\_ disease - spread through contact, no intermediate host (vector).
  - \_\_\_\_\_ - a mechanical vector (water, food, soil,...).

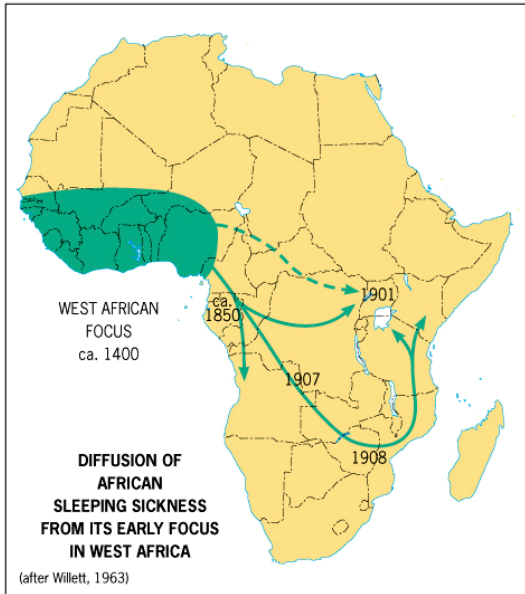
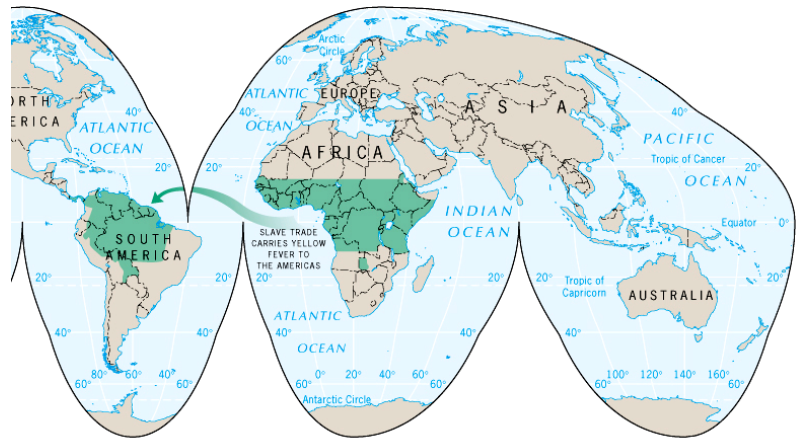
### Vectored Infectious Diseases

- \_\_\_\_\_ - occurs worldwide, but not at higher latitudes; mosquitoes are the vectors; symptoms include fever, chills, reduced energy, and higher susceptibility to other diseases (kills b/w 2-3 million yearly).
- In 1955, the WHO (World Health Organization) used DDT (a pesticide) to eliminate malaria in Sri Lanka (Ceylon); DDT is carcinogenic: trade one problem with another.



## Vectored Infectious Diseases (cont'd)

- \_\_\_\_\_ - now confined to tropical & near-tropical areas; mosquitoes are the vectors; symptoms - high fever w/ aches & vomiting; can color eyes and skin yellow (jaundice).
- \_\_\_\_\_ - source is in West Africa; tsetse flies are the vectors & Africa's huge wildlife population acts as a reservoir; symptoms - fever w/ swelling of lymph nodes, and swelling of limbs in some cases; inflammation can go to brain & spinal cord (lethargy).

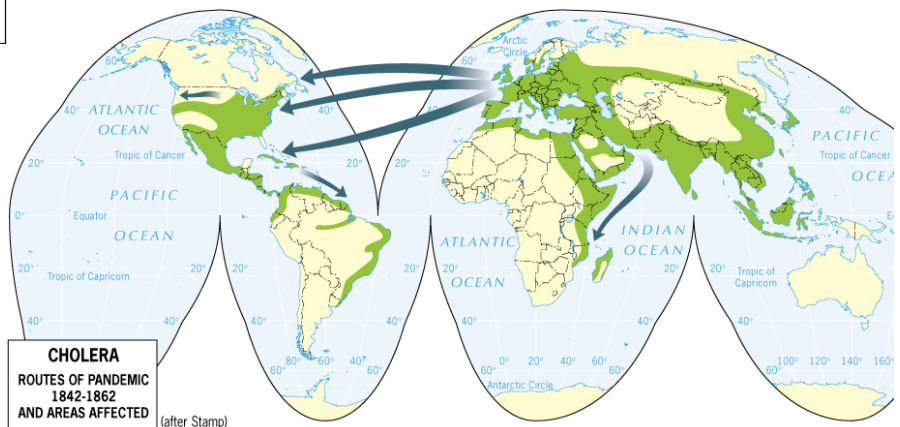


- \_\_\_\_\_ - very recent; a seasonal epidemic in North America that flares up in the summer and continues into the fall; mosquitoes are the vectors; symptoms of WNV may include fever, aches, nausea,... (affects the central nervous system); 80% show no symptoms at all.

## Nonvectored Infectious Diseases

- These diseases are passed by direct transmission through:
  1. bodily contact (w/o the vectors),
  2. contamination of food or water (fecal matter),
  3. contamination of the air (saliva - sneezing).
- \_\_\_\_\_ - source is often in China; transmitted from birds to pigs, from pigs to humans (but the virus survives in the air long enough to be transmitted w/o vectors); 1918 - worst pandemic in history (20-30 million died worldwide).

- \_\_\_\_\_ - source is in tropical Africa; spreads through exchange in bodily fluids; breaks down the immune system; people can carry HIV for years w/ no symptoms; 1980 - 200,000 cases; 2002 - >40 million cases.
- \_\_\_\_\_ - source is in India; symptoms include diarrhea & dehydration (death can be convulsive); hygiene prevents it (e.g. boiling water) - this fact was first discovered in England by Dr. John \_\_\_\_\_ in the 1850s; he mapped out the reported cases, and saved hundreds of lives.



## Other Disease Types

- \_\_\_\_\_ diseases - occur over time; often concentrated in urban/industrial cores (infectious is most common in the periphery); the U.S. top four causes of death - 4) \_\_\_\_\_ diseases (5%); 3) \_\_\_\_\_ (23%); 2) \_\_\_\_\_ (23%); 1) \_\_\_\_\_ Disease (31%)
- \_\_\_\_\_ diseases - result from gene mutations or accidents to chromosomes (e.g. radiation, viruses); some examples include Down's Syndrome, galactosemia (lactose intolerance).

