Unit 5

# **Medical Geography**

**Rural Geography** 

The following information corresponds to Chapter 30 in your textbook. 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.

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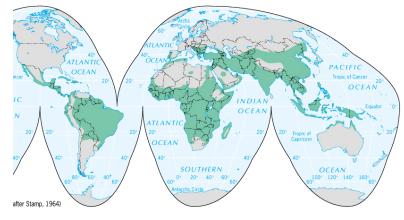
- \_\_\_\_\_\_ typically have source areas (cores), identifiable diffusion routes, and affect clusters of populations (regions).
- Regions where \_\_\_\_\_\_ prevails are also areas of poverty, inadequate medical services, poor sanitation, and sub-standard housing.
- \_\_\_\_\_ (IMR) reflects the overall 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,...).

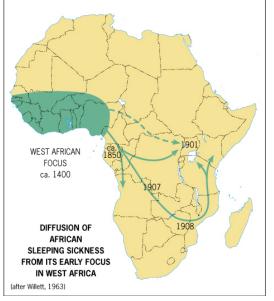
## Vectored Infectious Diseases

- \_\_\_\_\_\_ 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).

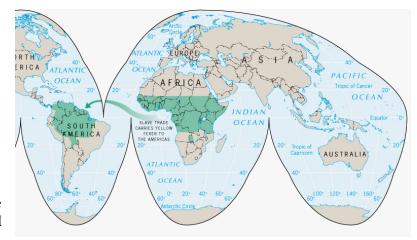


- \_\_\_\_\_\_ source is in tropical Africa; spreads through exchange in bodily fluids; breaks down the immune system; people can carry HIV for years w/ no symptoms; 1980 – 200,000 cases; 2002 - >40 million cases.
- \_\_\_\_\_ source is in India; symptoms include diarrhea & dehydration (death can be

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: Chronic & Genetic

- \_\_\_\_\_\_ 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).



\_\_\_\_\_\_- 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),
  - 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).

