

EPIDEMIOLOGY

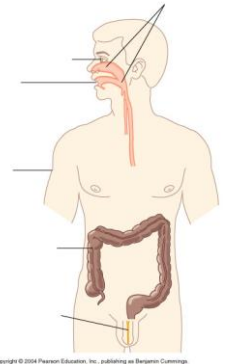
NORMAL FLORA / MICROBIOTA

WHAT

WHERE

WHO

ARE THEY IMPORTANT?



OPPORTUNISTS / OPPORTUNISTIC PATHOGENS

WHAT

WHY

LOOK FOR AUDIO PODCASTS ON NORMAL FLORA AND OPPORTUNISTS ("SKIN FLORA", "CLOSTRIDIUM DIFFICILE" ECT) AT <http://webhome.broward.edu/~sobenauf/mcb2013/podcasts/podcasts%20audio.html> AND THE VIDEO PODCAST "DANGEROUS FRIENDS" AT <http://podcast.broward.edu/~sobenauf/DangerousFriends.mov>

EPIDEMIOLOGY

WHAT IS IT?

CASE REPORTING

DISEASE TRANSMISSION

CATEGORIES

CONTACT

DIRECT

INDIRECT

FOMITES

RESPIRATORY (DROPLET)

ENTERIC (ORAL-FECAL)

FOODBORNE

AIRBORNE / WATERBORNE (VEHICLE)

VECTORS

RESERVOIRS

HUMANS

ANIMALS (ZOOZOSES)

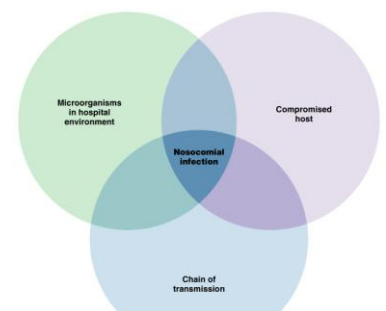
SOIL & WATER

NOSOCOMIAL INFECTIONS

WHAT ARE THEY

THE IMPORTANCE

THE CAUSES



BIOTERRORISM

PATHOGENESIS

GENERAL CONCEPTS

MECHANISMS OF ENTRY AND DISSEMINATION (SPREAD)

ROUTES OF ENTRY

ADHERENCE TO HOST

DISSEMINATION

PENETRATING HOST DEFENSES: COMPONENTS

CAPSULE

M PROTEIN

OUTER LAYER OF LIPID / WAX

PENETRATING HOST DEFENSES: TOXINS & ENZYMES

LEUKOCIDIN

HEMOLYSINS

COAGULASES

KINASES / STREPTOKINASE

HYALURONIDASE

COLLAGENASE

DAMAGE TO HOST CELLS

BACTERIA

DIRECT CELL DAMAGE

TOXINS

EXOTOXINS

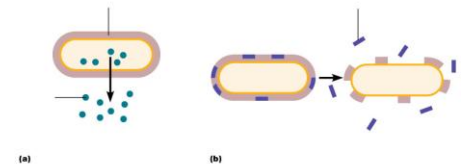
GENERAL CONCEPTS

NEUROTOXINS

CYTOTOXINS

ENTEROTOXINS

ENDOTOXINS



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IMMUNE RESPONSE

VIRUSES

DIRECT CELL DAMAGE

TOXINS

IMMUNE RESPONSE

FUNGI

DIRECT CELL DAMAGE

TOXINS

IMMUNE RESPONSE

PARASITES

DIRECT CELL DAMAGE

TOXINS

IMMUNE RESPONSE

LOOK FOR AUDIO PODCASTS ON DISEASE TRANSMISSION AND MECHANISMS (“VIRAL SHEDDING”, “THE 1918 FLU” ECT) AT <http://webhome.broward.edu/~sobenauf/mcb2013/podcasts/podcasts%20audio.html> AND VIDEO PODCASTS (“A CONTAMINATED WORLD” ECT) AT <http://webhome.broward.edu/~sobenauf/mcb2013/podcasts/podcasts%20video.html>

CASES AND EXAMPLES (ONLINE VIDEO)

<http://animal.discovery.com/videos/monsters-inside-me-the-leishmaniasis-parasite.html> (VECTORS)

<http://animal.discovery.com/videos/monsters-inside-me-babesiosis.html> (VECTORS)

<http://animal.discovery.com/videos/monsters-inside-me-the-cryptosporidium-parasite.html> (WATERBORNE)

<http://animal.discovery.com/videos/monsters-inside-me-toxocara-parasite.html> (ZOOONOSIS)
