

Bacterial Diseases

These notes are your ultimate revision weapon to revise Bacterial Diseases. We've distilled years of previous exam questions (PYQs) into one powerful, concise resource. Everything you need to know, nothing you don't.

- **PYQs, Decoded:** All key concepts from past exams, organized and simplified.
- **Revise in Record Time:** Short, precise, and designed for last-minute review.
- **Focus on What Matters:** Master high-probability topics and boost your confidence.

Diseases: Types, Causes, and Transmission

Bacterial Diseases



Disease	Causative Agent	Key Characteristics / Mode of Transmission
Botulism	Clostridium species	A specific food-borne intoxication (illness from toxins, not infection).
Cholera	Bacteria	Waterborne disease.
Dental Caries	Bacteria (from mouth interacting with food)	Caused by bacterial interaction with carbohydrate food particles.
Diphtheria	Bacteria	Preventable by the D.P.T. vaccine.
Leprosy	Bacteria	Treatable with Rifampicin.
Plague	Bacteria	Spreads through flea bites.
Pneumococcal Diseases	Pneumococcal bacteria	Cause pneumonia, meningitis, sepsis. Preventable by PCV vaccine.

Salmonellosis	Salmonella bacilli	A cause of general food poisoning.
Tetanus	Bacteria	Also known as Lockjaw. Transmitted through wounds. Preventable by D.P.T. vaccine.
Tuberculosis (T.B.)	Mycobacterium tuberculosis	Airborne transmission. Diagnosed by the Montoux Test. Treatable with Rifampicin. Preventable by BCG vaccine.
Typhoid	Bacteria	Waterborne disease that affects the intestines.
Whooping Cough (Pertussis)	Bacteria	A distinct disease; preventable by the D.P.T. vaccine.
E. coli Infection	E. coli	A cause of general food poisoning.
Syphilis	Bacteria	Transmitted through contact.

Viral Diseases

Disease	Causative Agent	Characteristics / Mode of Transmission
Dengue	Virus	Transmitted through the bite of an infected mosquito.
Influenza (Flu)	Virus	Clarified as viral, not bacterial.
Jaundice (Hepatitis A)	Virus	Waterborne disease.
Measles	Virus	-
Mumps	Virus	-
Polio	Virus	-
Rabies	Virus	-

Smallpox	Virus	-
Yellow Fever	Virus	Transmitted through the bite of an infected mosquito.

Protozoan & Other Diseases

Disease	Causative Agent	Characteristics / Mode of Transmiss
Malaria	Protozoan parasite	Transmitted through the bite of an infected mosquito.
Filaria	-	Caused by mosquitoes.
Beri-Beri	Deficiency	Caused by a deficiency of Vitamin B.
Scabies	Mite	Classified as an infestation.

Vaccines and Prevention

Vaccine	Protects Against	Key Facts
BCG	Tuberculosis (T.B.)	Should be administered to a newborn just after birth.
D.P.T.	Diphtheria, Pertussis (Whooping Cough), Tetanus	Combination vaccine for three bacterial diseases.
Pneumococcal Conjugate Vaccine (PCV)	Pneumococcal Diseases (e.g., pneumonia, meningitis)	Important in India; helps reduce antibiotic use, combating drug resistance. The claim that vaccines have "no side effects" is incorrect.

Medicines and Drugs

Drug / Class	Type / Use	Key Facts
Antibiotics		Drugs that act against bacteria.
Chloramphenicol	Antibiotic	A broad-spectrum antibiotic drug.
Rifampicin	Antimicrobial	Suitable for treating both Tuberculosis and Leprosy.
Sulpha Drugs	Antibiotic class	Effective against bacterial diseases. Cibazole is an example. Penicillin, Streptomycin, and Aspirin are not Sulpha Drugs.
Quinine	Antimalarial	Used to treat malaria.
Aspirin	Analgesic	A pain reliever, not an antibiotic.

Public Health Issues



- **Multi-Drug Resistance in India:**
 - **Primary Reasons:** Taking incorrect doses of antibiotics; using antibiotics in livestock farming; multiple chronic diseases in people.
 - **Not a Primary Reason:** Genetic predisposition.
- **Shallow Handpump Water:**
 - Can be contaminated, leading to waterborne diseases like **Cholera, Typhoid, and Jaundice**.
 - **Fluorosis** is caused by excessive fluoride and may not be caused by a shallow handpump.

Other Disease Classifications

- **Autoimmune Disease:** Rheumatoid Arthritis.
- **Genetic Disease:** Tuberculosis is **not** genetic; it is infectious.

- **Mental Disease:** Schizophrenia.
- **Modes of Transmission Summary:**
 - **Airborne:** Tuberculosis (T.B.)
 - **Waterborne:** Cholera, Typhoid, Jaundice
 - **Contact:** Syphilis
 - **Through Wounds:** Tetanus
 - **Vector-Borne (Mosquito):** Malaria, Dengue, Yellow Fever, Filaria
 - **Vector-Borne (Flea):** Plague

Know More About Bacterial Diseases:

- [Bacterial Diseases – Old Year Questions](#)
- [Bacterial Diseases One Liner Questions & Answers](#)

