

Overview of Common Diseases

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(A concise, organized guide for quick reference and deeper study)

1. Infectious Diseases

Category	Representative Conditions	Causative Agent	Main Transmission	Key Clinical Features	Primary Prevention
Respiratory	Influenza, COVID-19, Tuberculosis	Viruses (influenza, SARS-CoV-2) / Mycobacterium tuberculosis	Droplet, aerosol, close contact	Fever, cough, dyspnea, myalgia; TB ? chronic cough, night sweats	Vaccination, masks, ventilation, BCG (TB)
Gastrointestinal	Salmonellosis, Cholera, Hepatitis A	Bacteria (Salmonella, Vibrio cholerae) / Virus (HAV)	Fecal-oral, contaminated food/water	Diarrhea, abdominal cramps, vomiting; hepatitis ? jaundice	Safe food handling, water treatment, HAV vaccine
Vector-borne	Dengue, Malaria, Lyme disease	Dengue virus / Plasmodium spp. / Borrelia burgdorferi	Mosquito bite, tick bite	High fever, rash, arthralgia (dengue); cyclical fevers, anemia (malaria); erythema migrans (Lyme)	Insect repellent, bed nets, vector control, tick checks
Sexually Transmitted	HIV, Syphilis, Chlamydia	Virus (HIV) / Bacteria (Treponema pallidum, Chlamydia trachomatis)	Sexual contact, blood	Chronic immunosuppression (HIV); chancre, rash (syphilis); urethritis (chlamydia)	Safe sex, condom use, regular screening, PrEP (HIV)

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2. Non-Communicable Diseases (NCDs)

2.1 Cardiovascular Diseases (CVD)

Condition	Pathophysiology	Major Risk Factors	Typical Presentation	First-line Management
Ischemic Heart Disease (IHD)	Atherosclerotic plaque → myocardial ischemia	Hypertension, dyslipidemia, smoking, diabetes, sedentary lifestyle	Chest pressure, radiating pain, dyspnea, diaphoresis	Aspirin, β -blocker, statin, revascularization (PCI/CABG)
Stroke (ischemic & hemorrhagic)	Cerebral artery occlusion or rupture	Hypertension, atrial fibrillation, smoking, hyperlipidemia	Sudden focal neurological deficit, speech changes	Thrombolysis (ischemic), blood pressure control, neurosurgery (hemorrhagic)
Heart Failure	Impaired ventricular filling or ejection	Ischemic heart disease, hypertension, valvular disease	Dyspnea, edema, fatigue, orthopnea	ACE-I/ARB, β -blocker, diuretics, device therapy (CRT/ICD)

2.2 Metabolic Disorders

Condition	Core Mechanism	Diagnostic Criteria	Common Complications	Lifestyle/Pharmacologic Treatment
Type 2 Diabetes Mellitus	Insulin resistance + β -cell dysfunction	FPG ≥ 126 mg/dL, 2-hr OGTT ≥ 200 mg/dL, HbA1c $\geq 6.5\%$	Retinopathy, nephropathy, neuropathy, CVD	Diet, exercise, metformin, GLP-1 RA/SGLT