

Study Guide

Notes:

This GUIDE is NOT meant to be a comprehensive list of everything that may be on the NEHA RS Exam.

**Memorizing the definitions may not insure a passing grade.
It is **HIGHLY** recommended further reading take place in each area!**

Terms to Know:

Note: Many of these terms are used in multiple areas

EPIDEMIOLOGY - the study of the occurrence, frequency, and distribution of disease in human population.

Acute	Mode
Attack Rate/Attack Ratio	Morbidity
Carrier	Mortality
Case Definition	NIH
CDC	Nosocomial Infections
Chronic	Outbreak
Communicable	Pathogen
Emerging Infections	Pandemic
Endemic	Prevalence
Epidemic	Probability
Epidemiological Triad	Range
Etiological Agent	Reservoir
Fomite	Sporadic
Generation Time	Standard Deviation
Host	Statistics
Immunity (Active and Passive)	Surveillance
Incidence	Variance
Incubation	Virulence
Mean	World Health Organization
Median	

RADIATION

ALARA	Ionizing Radiation
Alpha	Isotope
Beta	Nucleus
Cosmic Radiation	Neutron
Curie (unit)	Nonionizing Radiation
Dosimeter	Nuclear Regulatory Commission
Electromagnetic Radiation	Proton
Electron	Radiation Absorbed Dose (rad)
Fission	Radionuclides
Frequency	Radon
Fusion	Roentgen
Gamma	Roentgen Equivalent Man (rem)
Geiger-Muller Counter	Somatic Effect
Genetic Effect	Wave Length
	X-rays

LEGAL TERMINOLOGY

Abatement
Civil Law
Condemnation
Criminal Law
Due Process
Duty of Care
Embargo
Eminent domain
Felony
Freedom of Information Act
Hearsay
Informed Consent
License
Variance
Writ of Mandamus

Malfeasance
Misdemeanor
Misfeasance
Nonfeasance
Ordinance
Public Nuisance
Regulation
Right of Entry
Seizure Order
Severability
Statute
Tort Law

Recreational Water Facilities

Alkalinity
Breakpoint Chlorination
Brine Systems
Chlorine

- Combined
- Free
- Total

Chloramines
Circulation Systems
Clarity
Cyanuric Acid
Disinfectants

- Bromine
- Chlorine
- Iodine

- Ozone
- UV Light

Filters

- Sand
- Cartridge
- Diatomaceous Earth

Filtration Systems
Flow Rate
Hardness
Langelier Saturation Index
NTU
Pumps
Skimmers
Stabilized Chlorine
Turnover Rate

MICROBIOLOGY

Aerobic
Anaerobic
Anasakis
Antibiotic
Antimicrobial
Ascariasis
Autoclave
Zoonosis
Vector
Bacteria
Bacterial Infection
Bacterial Intoxication
Bactericidal
Bacteriostatic
Coliform
Commensal

Cryophile
Disinfectant
Endospore
Enteric
Fungi
Histoplasmosis
Mesotroph/Mesophile
Mg/l and ppm
Molds
Mutation
Mycotoxin
National Safety Foundation
Normal Flora
Parasite

Pathogens

- Brucella spp.
- Campylobacter jejuni
- Bacillus cereus
- Clostridium botulinum
- Clostridium perfringens
- Cryptosporidium
- Entamoeba histolytica
- Escherichia O157:H7 coli
- Giardia lamblia
- Hepatitis A
- Hepatitis B
- Legionella pneumophilia
- Listeria monocytogenes
- Norovirus
- Pseudomonas
- Salmonella spp.
- Shigella spp.

- Staphylococcus aureus
- Streptococcus
- Trichinella spiralis
- Vibrio spp.
- Yersinia enterocolitica

Pathogenicity

Psychrotroph/Psycrophile

Rabies

Sanitize

Spirochete

Sterilize

Thermophile

Thermotroph/Thermophile

Trypanosis

Tularemia

Virus

Yeast

Zoonoses, Vectors and Pests

FIFRA Insecticide

Integrated Pest Management

Life Cycles

Pesticide

Pests

- Mammalian
- Birds
- Insects
- Flies

- Roaches
- Arachnids
- Mites
- Marine
- Plants

Rodenticide

Transmission Modes

FOOD

Adulterated

Air Break

Air Gap

Allergens

Anticoagulant

Back Flow

Comminuted

Contact/Non-Contact Surfaces

Cross Connection

Exclusion

Food and Drug Administration

First In First Out

Food Establishment

Foot Candle

Fumigant

HACCP

Highly Susceptible Population

Infection

Intoxication

Minimum Cooking Temperatures

Mixing Valve

NSF

Pasteurization

Person In Charge

pH

Physical, Chemical, Biological Hazards

PIC

Potentially Hazardous Foods

Ready To Eat Foods

Restriction

Temperature Danger Zone (Heating, Cooling,

Reheating

Temperature in Dish Machine

Thermometer Types

Time/Temperature Control for Food Safety

Toxin-Mediated Infection

USDA

Drinking Water

Potable
Public Water Supply/System
Maximum Contaminant Level
Hydrologic Cycle
Ground Water
Surface Water
Zone of Saturation
Turbidity
Conductivity
Disinfection By-Products
UV Radiation
Contact Time
Contact Tank
Cone of Depression
Sodium Thiosulfate
Back Wash
Coagulation
Flocculation
Sedimentation
Flotation
Filtration
Filter Types

Disinfectants Commonly Used
Different Types of Wells (Drilled, Bored, Driven, Dug)
Effect of Geological Substrates
Drinking Water Sampling Procedure
Annular Space
Pitless Adapter
Static Water Level
Bladder Tank
Dissolved Oxygen
Chlorination
Suspended Solids
Dissolved Solids
Total Dissolved Solids
Total Suspended Solids
Free Chlorine Residual
Mesotrophic
Oligotrophic
Eutrophic
Fluoridation
Grout
Biological Oxygen Demand
Safe Water Drinking Act

WASTE WATER

Absorption Field
Chemical, Physical, Biological Pollutants
Contours
Degradable
Effluent
Land Application
Nondegradable
Observation (Excavation) Hole
Percolation Test
Permeability
Primary Treatment
Redox Features

Retention Time
Sand Filters
Scum
Secondary Treatment
Seepage Pit
Septic Tank
Sludge
Soil Profile
Soil Texture
Solubility
Subsurface Wastewater Disposal System
Tertiary Treatment
Waste Stabilization Pond

Solid and Hazardous Waste

ACGIH
Biohazard Levels
Biological Fate of Toxicants
Biological, Radiation, Chemical Hazards
Boiling, Condensation, Freezing and Melting Points
Carbon Dioxide
Cells
CERCLA
CHEMTREC

Composting
Corrosive
Deep Well Injection
Densification
Dose-Response Relationship
DOT
EPA
EPA's 4 Levels of Protection
Factors Influencing Toxicity
Flammable
Flashpoint

Hazard Classes
Human Body Systems Affected by Toxicants
Hydrogen Sulfide
Ignitable
Incineration
Landfilling
Landfilling Methods (Trench, Area, Valley/Ravine)
LC50
LD
LD50
Leachate
Leachate Collection System
Liners
Manifest
Methane
Mutagens
PCB
RCRA
Reactive

Resource Recovery
SCBA
Solubility
Source Reduction
TD
Teratogens
TLV
Toxic
Toxicology
Transfer Station
TSCA
Vapor Pressure and Density
Waste Combustion
Waste Types

- Municipal
- Hazardous
- Infectious
- Solid
- Radioactive

Occupational Safety and Health

Controls and Prevention

- Engineering
- Ventilation
- Administrative
- Personal Protective Equipment

Health and Safety Hazards

- Chemical
- Physical
- Radiation
- Biological
- Respiratory
- Ergonomic

MSDS

NIOSH

OSHA

OSHA Standards (Design, Performance, Vertical, Horizontal)

PEL

Routes of Entry

- Ingestion
- Inhalation
- Skin Absorption

Universal Precautions

Personal Protective Equipment

- Venturi Scrubbers

Air Quality

Aerosols

Byssinosis

Carbon Monoxide

Control of Gases and Vapors

- Afterburners
- Gas Adsorption
- Gas Absorption

Hydrocarbons

Inertial Separators

- Single Cyclone Separator
- Multiple Cyclone Separator
- High Efficiency Separator

Inorganic gases

Mechanical Scrubbers

NAAQS

Organic gases

Oxides of Nitrogen and Sulfur

Ozone

Particulate Matter

Photochemical Smog

Primary Standards

Secondary Standards

Siderosis

Silicosis

Synergism

Wet Collection Devices

- Scrubbers

- Spray Chambers
- Electrical Precipitators
- Baghouse

Environmental Noise

A-weighted scale

dBA

Hearing Loss

- Conductive
- Sensori-neural
- Presbycusis
- Sociocucsis

- Sound-Absorption Coefficient
- Sound Transmission Class
- Sound Transmission Loss

Noise Reduction Coefficient