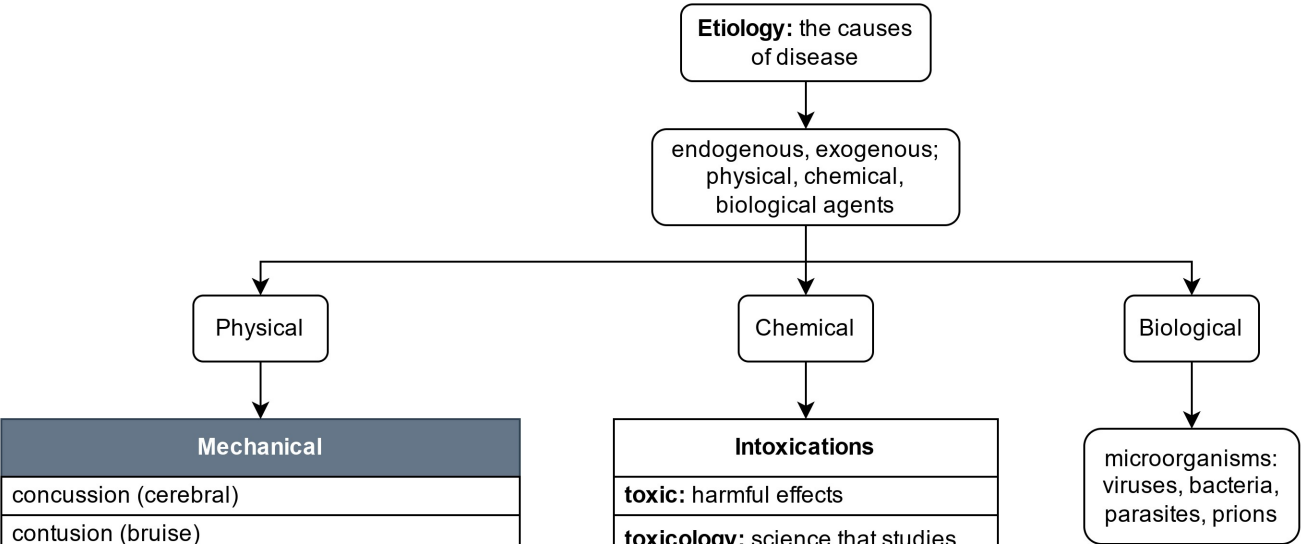




Mechanical
concussion (cerebral)
contusion (bruise)
wound (blood)
Motion sickness
body swaying (dizziness)
speed and acceleration (rollercoaster)
Gravity
orthostatism (getting up quickly from the couch)
sedentary lifestyle (↑CVDs)
prolonged stay in bed
Microgravity
cardiovascular, muscular atrophy, bone decalcification, urolithiasis, circadian rhythm alteration, cancer
Dysbarisms
absolute and relative <u>hyperpressure</u> (blast wave, diving)
absolute and relative <u>hypopressure</u> (altitude sickness, air cabin decompression)
Vibrations
local or systemic (reynod, carpal tunnel)
Noise pollution
noise >55dB. damage= intensity/duration
Cold
hypothermia <35°C. local or systemic. 1. fighting phase (maintain body heat) 2. claudification phase (body gives in to the cold)
erythema, immersion foot, frostbite (necrosis), cholestatoma
Heat
local or systemic. 1st degree burns (skin), 2nd degree burns (dermis), 3rd degree burns (all layers)
heat stroke >40°C ambient
Radiation
ionising (cumulative) → cancer. natural, planned or emergency; external or internal
solar UV (in severe burns)
non-ionising: mobile phones, microwaves, electromagnetic waves
Electricity
low voltage → few problems (cut off current, do not touch electrocuted)
high voltage → many problems (cut substation and resuscitation)

Intoxications
toxic: harmful effects
toxicology: science that studies toxins.
toxin: natural substance
xenobiotic: foreign substance
drug: modifies body functions
WHO classification
recreational use: alcohol, tobacco, cocaine, heroin, cannabis
natural: caffeine
endogenous: most powerful ones
exogenous: factories
food: junk food, ultra-processed
cooking materials: aluminum, Teflon, heavy metals
plastic packaging: PVC (#3), polystyrene (#6), BPA (#7)
cosmetics and creams: asbestos, phthalates, lead, cadmium, additives
toxic additives in clothing: dark colors → heavy metals
pollution: air quality = quality of life
car air fresheners = chemicals
pesticides: DDT, organophosphates and carbamates

