**Model five Assignment**

**Presented by: Wani Moses Joseph**

**Postgraduate Diploma in Public Health**

**Course code: PGD007**

**01)-Define Environmental health, what are its purposes?**

The term **environment** refers to the surrounding in which we live and it constituent the air, water and the physical features. Thus according to National Environmental health Association (NEHA) board of directors meeting held in crystal city Virginia on July 2013 defined the **term environmental health** as science and practice of preventing human injuries and diseases and promoting well-being by identifying and evaluating environmental sources and hazardous agents and limiting exposure to these hazardous physical, chemical and biological agents in the air, water, soil, food and other environmental media or setting that may adversely affect human health. The purpose of environmental health can be explained as below. Investigate, sample, measure and assess hazardous environmental agents in various environmental media and settings.

* Recommend and apply protective interventions that control hazards to health of human beings.
* Develop, promote and enforce guidelines, policies, laws and regulation to prevent adverse effect of the agents.
* Develop and provide health education communication and educational massages to the people concerns environmental hazards.
* Engage community members to understand, address and resolve the health problems
* Review construction and land use plans and make recommendation
* Interpret research utilizing science and evidence to understand the relationship between health and environment.
* Interpret data and prepare technical summaries and reports. (National Environmental Health Association crystal city Virginia July 2013).

**02)-Identify and explain the five focal areas of environmental health?**

The five focal areas of concern to environmental health include the following: Air quality, Water quality, Radiation and industrial chemicals, Food and drug safety and Safe disposal of hazardous waste.

**Air quality:** Air is mixture of gaseous and it is found in abundance on planet earth atmosphere, it consists of oxygen (20.95%), Nitrogen (78.09%), Argon (0.93%), carbon dioxide (0.03%) and small amount of other gases. The air also contains a variable amount of water vapor, on average around 1% at sea level and 0.4% over the entire atmosphere. Humans are designed by eons of evolution to live on the earth and to breathe the earth’s air (Oxygen) while plants use the carbon dioxide in presence of sunlight to produce their own foods such as starch.

**Air pollution** is the presence or introduction of natural or man-made particles or gases into the atmosphere that have harmful or poisonous effects to humans and animals. Air pollution can be of two categories outdoor air pollution and indoor air pollution.

**Outdoor air pollution** involves exposures that take place outside of the built environment, The sources include; Noxious gases (Sulphur dioxide, carbon monoxide, Nitrogen oxide and chemical vapors), Fine particles produced by the burning of fossil fuels (coal and petroleum) used in energy production (Cars and Factories), tobacco smoke and ground level Ozone (a reactive form of oxygen and primary component of urban smog), dust, pollen and mold spores may be suspended as particles**. Indoor air pollution** involves exposures that take place in the built environment, including homes and schools. The sources include; gases (Carbon monoxide and radon), household products and chemicals, building material asbestos, formaldehyde and lead), allergens from cockroach, mouse droppings and tobacco smoke. **Health effects** associated with air pollution include; Respiratory diseases (Asthma and changes in lung functions), cardiovascular diseases, adverse pregnant outcome (preterm birth) and cancers. In 2013 World health organization concluded that outdoor air pollution is carcinogenic to humans. (National institute for Environmental health NIEH the impact of climate change on human health in the US: A scientific Assessment).

**Clean air act of 1970**

In U.S, **The** **Clean Air Act of 1970** established strict air quality standards, set limits on several major pollutants, and mandated reduction of automobile and factory emissions. Amendments to the Clean Air Act, strengthening some air quality regulations, were passed in 1977 and 1990. **Criteria air pollutants:** The Clean Air Act and its amendments require monitoring and regulation of six common air pollutants, called **criteria air pollutants**, known to be harmful to health and the environment: particulates, sulfur dioxide, carbon monoxide, nitrogen oxides, ozone, and lead. All of these substances enter the air as a result of combustion—for energy in power plants or motor vehicles, or for solid waste disposal or industrial processes.

**Water quality:** Safe drinking water to public health has been clear since John Snow identified polluted water as the source of London’s cholera epidemic in 1855. Major epidemics of cholera and other waterborne diseases broke out periodically in the United States until the end of the 19th century. Contaminated water is still a major cause of disease and death in developing countries. Common water pollutants include, Microbial pathogens, chemicals discharges from industries such as mercury as in Minamata bay or polychlorinated biphenyl in Hudson River and deposition from the air as acid rain or runoff from land. The goals of cleaning up lakes and Rivers and ensure safe drinking water were addressed by congress in separate legislations, the clean water act of 1972 and safe drinking water act of 1974.

**Clean water act:** The clean water act set national goals that lakes and Rivers should be “fishable and swimmable’’ and that all pollutant discharges should be eliminated. The first cleaning up on the nation’s waterways focused on **“point-source” pollution.** These are well-defined locations that discharge pollutants into lakes and rivers. Point-source pollution comes from municipal sewage and industrial discharges. In 1987 reauthorization of the Clean Water Act focused on cleaning up nonpoint-source pollution, which has proven to be a much more difficult task. Laws governing point-source pollution set requirements for treating wastewater so that it can be discharged into waterways without causing human health problems or disrupting the aquatic environment.

**Nonpoint source pollution:** This hasincreasingly threat the water quality. These contaminants come from storm water runoff from farmland, construction sites, and urban streets. Agriculture is the leading source of water pollution, contributing soil, manure fertilizers, and pesticides that wash into streams and lakes. Construction activities also contribute soil to runoff water, together with oil, tar, paint, and cleaning solvents. Nonpoint source pollution can be prevented by planting vegetation on exposed soil, incorporating more green space into urban areas, minimizing the use of chemical fertilizers and pesticides, and controlling litter.

**Radiation safety**: Radiation is energy travelling through space. Sunshine is one of the most familiar forms of radiation; it delivers light, heat, and suntans. Beyond ultraviolet radiation from the sun are higher-energy kinds of radiation used in medicine and also at low doses from space, from the air, and from the earth and rock, collectively referred to as **ionizing radiation**. Ionizing radiation from uranium ore and nuclear plant is part of human environment. At high levels it is hazardous, but at low levels such as we all experience naturally, it is harmless. Radon gas, produced by the natural radioactive decay of uranium is present in many homes, a fact that was recognized only in the mid-1980s. Prolonged exposure to radon is potentially caused lung cancer. Ultraviolet radiation from the sun is a significant cause of skin cancer and melanoma.

The discovery in the mid-1890s of **x-rays** aroused great public excitement and led to extensive human exposures before the danger was recognized. During the early decades of the 20th century, x-ray treatments were popular as cure-alls for a variety of ailments, and radioactive ingredients were added to patent medicines. The first alarm was raised in the mid-1920s, with the deaths from kidney and bone disease of a number of workers who painted watch dials with radium so they would glow in the dark. Evidence that chronic exposure to low levels of x-radiation caused cancer came from epidemiologic studies that began in the 1930s. One study compared death rates of radiologists with those of other medical specialists and found that the average age at death for radiologists was five years younger than that of other specialists. Radiation’s damaging health effects were confirmed by long-term follow-up studies of survivors of the atomic bombings of Hiroshima and Nagasaki, Japan, which ended the Second World War. The incidence of leukemia and other cancers was significantly increased among the people.

**Food and Drugs safety:** The need for government oversight of the food supply, like many other public health measures, arose with the urbanization of the population. Demands for action arose as the public became aware of unhygienic conditions in meatpacking plants*,* adulteration foods and the use of toxic additives to improve color and conceal spoilage. The Federal Food and Drugs Act and the Meat Inspection Act, of 1906 established a program to supervise and control the circumstances of manufacture, labeling, and sale of food. 1906 Act also included provisions to control manufacturing, labeling, and sale of drugs. The U.S. Food and Drug Administration (FDA), created to oversee regulation of food and drugs, were later given authority over cosmetics, medical devices, and feed and drugs for pets and farm animals.

**Foodborne diseases:** These are diseases acquired by consumption of contaminant with pathogens. Contamination of foods with bacteria, viruses, or parasites due to breakdowns in sanitation and/or proper food handling practices. *Salmonella and Escherichia Coli 0157:7* bacteria are common contaminants of poultry, meat, and eggs.

**Prevent of Foodborne diseases:** A variety of federal, state, and local agencies are responsible for protecting the safety of the food supply. The FDA and the U.S. department of Agriculture are responsible for ensuring foods are safe, wholesome and properly labelled. The USDA is responsible for the safety of meat and poultry and products containing cooked meat or poultry and processed eggs. This involves inspection of all meat and poultry processing plants daily and an inspector must be on site whenever a slaughtering plant is in operation. The FDA is responsible for all other foods, including seafood and produce as well as inspections and setting standards for the safe growing, harvesting, sorting, packing, and storage of fresh fruits and vegetables. Foodborne diseases can be prevented by use of radiation to kill microbial contaminants in food. Radiation treatment kills pests in dried herbs, spices, and tea, controls insects in wheat and flour, and kills the parasites that cause trichinosis in undercooked pork. It reduces the contamination of chicken breasts with *Salmonella*, ground beef with *E. coli* 0157:H7, and shrimp with cholera bacteria.

**Safe waste disposal and Sewage treatment**: The primary step is to remove suspended solids by screening and allowing them to settle out by gravity in settling tanks. The secondary stage is to break down the remaining organic materials using biological processes: The wastewater is mixed with bacteria and plenty of oxygen, converting the organic wastes into carbon dioxide, water, and minerals. The wastewater is then usually disinfected with chlorine before being discharged into the environment. Discharges from industrial sources are the second major category of point-source pollution also regulated by the Clean Water Act. Industries that discharge directly into the nation’s waterways are required to obtain a permit specifying allowable amounts and constituents of pollutants they may discharge. They must routinely monitor their discharges, and they must report regularly to the EPA. (Environmental issues in public health model page4, 21-22, and 38-41).

**03) What role can the government in your country play to ensure environmental health?**

South Sudan environmental policies are still under developing. As the custodian of the nation’s health, the Ministry of Health, Government of South Sudan (GOSS) with ministry of environment are responsible for ensuring safe environment for all.In 2006, the Health Association of South Sudan developed a vision of health for South Sudan. “A healthier nation, reduced health inequalities, and better quality of life.’’ These activities include: sanitation, waste disposal, water; food safety, cigarette smoking and alcohol. In effort to safeguard the environment the following are the roles played by Government.

* Sets Laws and regulations to enforce, the measures to be taken by administrative authorities for preventing or reducing communicable diseases.
* The measures for assuring the protection of food commodities on sale as well as the measures for assuring the disinfections or destruction of objects.
* Enforcement of public participation in critical environmental sanitation services and designation of areas and facilities for the disposal of wastes.
* Adequate provision by developers for the collection, intermediate storage, treatment and disposal of solid and liquid waste; Licensing and monitoring of environmental sanitation service providers.
* Tariffs for environmental sanitation services and their collection by contractors, franchisees and Ownership of wastes.
* Measures to prevent pollution of water for consumption as well as Measures destined to prevent pollution of potable water.
* Monitoring anyone who offers the public with water to drink or for human food, and which includes frozen food should ensure that the water conforms to the portability norms and regulations.
* Management and disposal of hazardous wastes and Storage of wastes on the premises of waste generators.
* Enforce regulations and measures necessary to combat all elements of pollution and protect the natural level of the environment and public health.
* Measures for the prevention and fight against noise and other alternative nuisances have to be observed at the local premise, environment premises and main agglomerations.
* Monitoring the activities and behavior of individuals and institutions, which cause or are likely to cause environmental pollution or vector breeding?
* Individual and communal recycling of wastes including any other matters that demand local regulation to achieve and maintain a clean and healthy environment.
* The conditions about running of mortuaries are precisely by means of regulations. Each town or agglomerations have to have a cemetery. The competent authorities are charged to assure the maintenance and protection of the cemeteries.
* The establishments for the preparation, sale and conservation of food products have to be clean, aired and fresh. The consortium about the sale and material contact with food products have to be free from all contamination.
* Banned from the preparation, conservation, packaging of foodstuff of chemical products and other elements and objects contrary to sanitation norms and juridical sensitivity to undermine the health of the population.
* All people working in manufacturing establishments and sale of foodstuff must be compliant with the measures of sanitation control, prevention and treatment.
* All establishments for hotels, restaurant or bar must be in a state of good hygiene and compliant with continuous sanitary control. The functioning and operation have to conform to sanitary norms and juridical enforced to guarantee health of the population.
* The disinfections of establishment of hotels, restaurant or bar have to be effected periodically by public hygiene agents or the enterprise.
* Inclusion in development permits of conditions to prevent overcrowding, pollution, blockage of drainage channels, blocking of easement and encroachment on building reservation areas.
* Enforcement of construction/provision of domestic toilets in every residential, commercial and industrial property. (Public health and health policy of South Sudan). (Public health and health policy of South Sudan).

**04)-Older people are more vulnerable to diseases, Why is this so? Identify and explain four diseases that are common among the older generation.**

Risk factors of ill health among older people, as people age, they become more susceptible to disease and disability. However, much of the burden of ill health among older people can be reduced or prevented by adequately addressing specific risk factors, including: Injury, Development of non-communicable diseases, Poverty, Social isolation and exclusion, mental health disorders and Elderly maltreatment.

**Injury:** Falls and the injuries to which they often lead cause a large share of the burden of disease and disability on older people. The risk of falls increases steeply with age. Injuries from falls (such as femur fracture) usually require hospitalization and costly interventions, including rehabilitation, and cause much of the functional limitations that lead to the need for long-term care, including admissions to nursing homes. Frailty in itself can considerably increase the risk of falls, which can happen in all settings. About 30–50% of people living in long-term care institutions fall each year.

**Risk factors of non-communicable diseases:** Healthy ageing is a lifelong process. Patterns of harmful behavior, often established early in life, can reduce the quality of life and even result in premature death. Poor nutrition, physical inactivity, tobacco use and harmful use of alcohol contribute to the development of chronic conditions. Diabetes, cardiovascular diseases, cancer, chronic respiratory diseases and mental disorders account for an estimated 77% of the disease burden and 86% of the deaths in the European Region. The risk of premature death actually decreases by 50% when people stop smoking at age 60–75 years. “the overall evidence for adults aged 65 years and above demonstrates, men and women who are more active have lower rates of all-cause mortality, coronary heart disease, high blood pressure, stroke, type 2 diabetes, colon cancer, breast cancer, a higher level of cardiorespiratory and muscular fitness, healthier body mass and composition, and a biomarker profile that is more favorable for the prevention of cardiovascular disease, type 2 diabetes and the enhancement of bone health.

**Poverty:** The risk of poverty grows with older age and is much higher among women than men. The prevalence of poverty (defined as having less than 60% of the national median income) among people older than 65 years varies widely across Europe. For European Union countries, for example, the prevalence is 4% in Hungary, 5% in Luxembourg and 7% in the Czech Republic, but 51% in Latvia, 49% in Cyprus and 39% in Estonia. Moreover, many older people cannot afford to pay health costs, including prescription drugs, from their own pockets. WHO/Europe works closely with Member States to support them in developing policies that reduce this financial risk and ensure a more equitable distribution of the burden of health system funding.

**Social isolation and exclusion, mental health disorders:** Loneliness, social isolation and social exclusion are important social determinants and risk factors of ill health among older people. They affect all aspects of health and well-being, including mental health, the risk of maltreatment and the risk of emergency admission to hospital for avoidable conditions, such as severe dehydration or malnutrition. In all countries, older women have a higher risk of social isolation than older men. Depression among older people is frequently undiagnosed. Its prevalence in those over 65 in the European Region is estimated at 2–15%. Mental health support, including preventive action, is a vital, often neglected, aspect of medical and social attention to older people.

**Elder maltreatment:** Elder maltreatment is defined as physical, sexual, mental and/or financial abuse and/or neglect of people aged 60 years and older. The scale of the problem has not been fully investigated, but estimates indicate that at least 4 million older people in the WHO European Region experience it in any one year. Maltreatment affects both the mental and physical well-being of older people and, if unchecked, reduces the quality of life and survival. WHO/Europe’s “European report on preventing elder maltreatment” reviews the findings of recent surveys and programs to address the problem in the Region. (European reports on preventing elder maltreatment WHO/Europe, 2011).

**Four diseases common among the older generation**

**Osteoporosis:** It is the condition that results from loss of bone density. The bone loss is common with age especially in women following menopause leading to Osteoporosis- ‘’porous bone’’ that easily breaks. Smoking and alcohol consumption increase the risk of Osteoporosis while obesity appears to reduce the risk. The extend of Osteoporosis depends on the bone density easier in life, which is determined by number of factors including; genetic factor, diet, physical activity, thus drinking milk and exercising in youthful age protect women against osteoporosis late in life. Osteoporosis has no symptoms, and older people are unaware they have the problem until they suffer a broken bone. Hip fractures are the most serious consequence of osteoporosis leading to substantial disability and death. Fractures of the vertebrae, even more common, might go unrecognized but often lead to progressive loss of height and the curvature of the upper spine called “dowager’s hump. **Prevention of Osteoporosis,** Taking estrogen after menopause can protect women from bone loss and reduce the risk of hip fracture. Adequate amounts of calcium (1000 milligrams [mg] per day for adults under 50 years and 1200 mg for those over 50) and vitamin D (200 mg per day for everyone up to 50 years, 400 mg for those 51 to 70, and 600 mg for those over 70. Good sources of calcium are milk, leafy green vegetables, soybeans, yogurt, and cheese. Vitamin D is produced in the skin by exposure to the sun and is found in fortified milk and other foods.Physically active at least 30 minutes per day for adults and 60 minutes per day for children, including weight-bearing activities. (Environmental issues in Public health Page 78 model five).

**Alzheimer’s disease and other Dementia: Alzheimer’s disease** is one of the most dreaded afflictions of old age. It robs the individual of memory and individuality, and eventually reduces him or her to the helplessness of an infant. Caring for someone with Alzheimer’s imposes a crushing emotional, physical, and financial burden on a family. **Dementia** among the elderly is a major public health problem, currently affecting an estimated 5.3 million people in the United States. Alzheimer’s is the most common cause of dementia in the elderly. Others include; vascular dementia, due to stroke or a series of ministrokes, impairing blood circulation in the brain or traumatic brain injury. Diagnosing Alzheimer’s is done by; Taking a clinical history and administering question-and-answer tests of memory and skills at language and arithmetic. Brain imaging studies such as computed tomography (CT), positron emission tomography (PET), and magnetic resonance imaging (MRI) scans are also useful.

**Oral Health**; Older people suffer increasingly from diseases and impairments of the mouth, including tooth loss, dental caries, periodontal disease, salivary dysfunction, cancer and precancerous conditions, and chronic pain. These problem severely impact on quality of life, impair the individual’s ability to chew, taste, and swallow, thereby posing a threat to physical health and nutrition far beyond the anatomical parts that are primarily affected. Sensory impairments, disorders of the mouth may diminish social functioning by affecting speech, facial esthetics, and self-esteem. Healthy behaviors throughout life, or improving health status by instituting healthier habits at any time, by quitting smoking, use better oral hygiene self-care practices, and use professional dental services.

**Impairment of vision and hearing:** Loss of vision and hearing are the most prevalent conditions affecting elderly people. These conditions are disabling, limiting the individual’s ability to interact with the environment and communicate with others. Loss of vision increases the risk of falls and other injuries restrict the individual’s ability to drive. Impairment of vision or hearing is likely to lead to social isolation, a risk factor for poor health at any age and an even greater risk factor in the elderly. Sensory loss also is associated with depression and cognitive impairment in the elderly. The leading causes of vision loss in elderly include; cataracts, Glaucoma, macular degeneration and diabetic retinopathy. The hearing loss in the elderly is characterized by reduction in sensitivity to higher frequency tones and, therefore, difficulty in comprehending speech. (Environmental issues in public health model five pages 78-80).

**05)-Identify one health effect that is associated with contaminants in the work place.**

**Asbestos:** Asbestos is the name given to six minerals that occur naturally in the environment as bundles of fibers that can be separated into thin, durable threads for use in the commercial and industrial application. These fibers are resistant to heat, fire and chemical and are poor conduct of electricity. Asbestos are use in building, construction industries for strengthening cement and plastics, insulation, and roofing, fireproofing and sound absorption as well as in ceiling and floor tiles, paints coating and adhesives. The shipbuilding industry used asbestos to insulate boilers, stream pipes and hot water pipes. Because of the asbestos adverse health effects, in the late 1970s, the U.S. consumer product safety commission banned it use, in 1989, the U.S. environmental protection Agency banned all news uses of asbestos. EPA also established regulations that require school systems to inspect buildings for the presence of damaged asbestos and to eliminate or reduce asbestos exposure to occupants by removing or encasing it.

People are exposed to asbestos in their workplace especially the miners who are at greater risk of adverse health effects of asbestos exposure. Asbestos exposure can also occur at communities or homes where asbestos containing products are disturbed like the floor, ceiling and wall releasing asbestos dust into the air. When the asbestos are breathed in, they get trapped in the lungs and remain there for a long time, causing inflammation of the lungs resulting into serious health problems. Asbestos is known human carcinogen (cancer causing substance), according to International Agency for Research on Cancer (IARC) there is sufficient evidence that asbestos causes [mesothelioma](https://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=CDR0000044323&version=Patient&language=English) (a relatively rare cancer of the thin membranes that line the chest and abdomen), and cancers of the lung, larynx, and ovary. Asbestos exposure may also increase the risk of asbestosis (an inflammatory condition affecting the lungs that causes shortness of breath, coughing, and permanent lung damage) and other nonmalignant lung and pleural disorders, including pleural plaques (changes in the membranes surrounding the lung), pleural thickening, and benign pleural effusions. **(**Health effects assessment for Asbestos, September 1984. EPA/540/1-86).

**06)-Globalization has played a major role in environmental health. Discuss the positive and negative impacts of globalization on the environmental health?**

Globalization is the term that describes growing interconnectedness of nations through trade and communication. Access to communication and transportation worldwide, globalization has become key dynamic in the world marketplace and corporate development. It thus poses both positive and negative impacts on the social, political, economic terms and on the environment.

**Positive impacts of globalization on the environment**

* Give access to a larger market: Through globalization, countries and companies have access to a bigger consumer base. Instead of only selling products in their country a business can expand to other regions boosting sales and in the process making more money.
* Provide cheaper Goods for consumers, because of globalization a lot of companies are moving to areas where their cost of production is low; in turn offer cheaper products because they are not expensive to make hence lower prices for consumers.
* Globalization wets countries do what they do best: for example, a country can buy cheap steel from another country instead of making its own steel. They can then focus their efforts on making other things they are good at, like computers and export them to the countries they import cheap steel.
* Leads to better economics; with many multi nation’s heading to Africa to tap the consumer base, the world more jobs are created helping people in the continent to get better wages and improve their standard of living. The investments by these multinational or foreign countries also help strengthen the economics of these countries with foreign exchange they bring in.
* Promotes World Peace and Unity; Globalization brings Governments together so that they can tackle common goals together. For example, due to globalization world leaders have seen the impacts of pollution and have resolved to tackle climate change together and this has poster peace and unity.
* Innovation; the desire to make a profit has always been a spur to expanded trade, innovation, and the communication of ideas. The great ideas rom leader spread more easily.
* Better quality and Variety; competition from different countries drives firms to improve their products. Consumers have better quality and more variety as a result.

**Negative impacts of globalization on the environmental health**

There are concerns about how long life on Earth, is going to survive. The human race is at the brink of a self-created disaster. The Environmental problems today include; Air-related Environmental, Water-related Environmental, Land-related Environmental and Other Environmental Problems. These include;

* **Greenhouse effect/Global warming**,any gas in the atmosphere that absorbs and emits radiation in the thermal infrared range is called a greenhouse gas. The greenhouse effect is a process by which thermal radiation from a planetary surface, is absorbed by atmospheric greenhouse gases, and is re-radiated in all directions. This process repeats over and over again, trapping radiation in the atmosphere. This is one of the major causes of global warming. Global warming is causing the Earth to lose its snow cover; glaciers are melting, the sea-level is rising, and a lot of arctic floral and faunal species are on the verge of extinction.
* **Global warming:** Carbon dioxide is the component of the atmosphere. The atmospheric carbon dioxide acts like glass of a greenhouse allowing sunlight to enter but trapping the heat inside. The resulting greenhouse effects lead to warmer temperatures on earth surfaces. The evidenced by average temperature of earth increased by about 1.5 F between 1880 and 2012.
* **Depletion of Ozone layer:** Depletion of Ozone is the manifestation of effects of air pollutants. Ozone is harmful to respiratory system at ground level. However, Ozone occurs natural as components of upper atmosphere provides a protective layer against ultraviolet. Detection of chlorofluorocarbons in ozone hole opened over the Antarctica in early 1980 results of chemicals, refrigerants spray can propellants. The danger is increase ultraviolet ray to ground level causing increase risk of cataracts causing blindness, skin cancer and harm to other organization including crops hence threating the planets.**,**
* **Air pollution.** The quality of air we breathe is worsening by the day. This includes the quality of air outside our homes (outdoor air quality), as well as indoor air quality. Poor air quality hampers children and old people from performing daily activities, or even stepping out of their homes. Air pollution is probably one of the most dangerous anthropogenic effects on the environment, since we cannot control the air we breathe. Vehicular traffic, smog created by smoke emitted by vehicles and factories, aerosols, volatile organic compounds present primarily in paints, varnishes, and refrigerants, all contribute to air pollution. According to WHO poor indoor air quality can lead to respiratory infections, coronary diseases, and even lung cancer.
* **Acid rain:** Acid rain is produced when two common air pollutants—sulfur dioxide and nitrogen dioxide—react with water to form sulfuric acid and nitric acid. It is a major threat to the environment. The impacts of acid rain include; damage to forests, reduction in crop yields and corrodes surface of buildings. The acid rain also turns the lakes and river acidic resulting into killing of freshwater shrimp, bacteria and interfering with fish reproduction, acid rain also dissolves aluminum, lead, copper and mercury increasing the toxic level of these mental in the drinking water.
* **Wastewater**, Due to anthropogenic effects of human development, the components of wastewater are changing, so that more materials cannot be taken care of, are added to wastewater and ultimately to water in general. If the amount of these substances increases, they will accumulate in the food chain. Eutrophication is a grave consequence of inefficient and/or inadequate treatment of wastewater.
* **Urban runoff,** urban run-off refers to rainwater running off land, and into water bodies. This is a natural process, with ever-increasing urbanization, this affects water bodies adversely. Urban run-off causes deposition of oil, gasoline, garbage, heavy metals, fertilizers, and pesticides, synthetic organic compounds into the water bodies ultimately entering the food chain, causing a number of health complications.
* **Eutrophication,** Eutrophication is excessive growth of phytoplankton in a water body. All natural water bodies are subject to water pollution; this adds a number of 'substrates' such as phosphates, nitrates and sewage waste to water sources. These substances boost the growth of plants (especially fast-growing plants) to an extent it completely depletes the water body of oxygen, and other nutrients. Algal bloom is one of the effects of eutrophication. The depletion of oxygen (or hypoxia) can lead to death of many fish species and other forms of aquatic life.
* **Water Crisis,** when the amount of water present in a region is unable to meet the demand of all life present in that region, the situation is called a water crisis. Scarcity of usable water is the main reason for water crisis. This scarcity has arisen due to a number of things, including wastage of water, deforestation and urbanization. More than 9 million people all over the world do not have access to potable water. Sudan and Venezuela top the list of regions with the most number of people facing a water crisis. Water is life. No water means, no life.
* **Marine pollution and acidification,** Marine pollution is more of a consequence the contributing factors are inefficient and/or inadequate wastewater treatment, urban run-off, eutrophication and solid materials, especially plastic, create a huge nuisance. Marine acidification, on the other hand, refers to the effect of anthropogenic carbon dioxide on the pH of oceans.
* **Urban Sprawl**, Urban sprawl is the tendency of cities and suburbs to spread and encroach the outskirts of a certain area. The most serious consequence of urban sprawl is the rise in auto-dependent development, which makes car-dependency mandatory, leading to more fuel consumption, more air pollution, and a number of other things. A consequence of urban sprawl is on the overall health of the human population, less productivity at work, duller social life, less social interaction, strained relationships, even psychological problems.
* **Habitat fragmentation/Destruction,** anthropogenic actions cause land fragments. When urbanization encroaches upon forests, wild animals experience habitat fragmentation. In our bid to create more space for ourselves, we are taking away from the habitat of wild animals, and they have nowhere to go. Habitat fragmentation has put many species on the brink of extinction. Native vegetation cleared to make space for agriculture and dwellings. In the process many plant species are facing extinction.
* **Desertification,** Desertification is when an ordinary piece of land is converted into a desert. The scariest prospects of human development; to convert a beautiful garden, a park, deforestation of the forests for timbers used in construction paper production all resulted into loss of vegetation and hence desertification. One of the most intense examples of desertification is that of Lake Chad, the lake has shrunk so much that more than 95% of it is lost.
* **Land Pollution/Waste disposal,** Land pollution is primarily caused due to inefficient and/or inadequate waste disposal, increased mechanization, and an excessive use of chemical fertilizers, and pesticides in gardens and farms. This reduces plants and animals productivity. (Help save nature).
* **Soil pollution,** Soil pollution is a part of land pollution but with even more serious consequences, in the form of poor quality land for agriculture. Rainwater collects and deposits all land pollutants to water bodies, so there is a two-fold entry of pollutants in our food. Not only do these chemicals harm us, they also have adverse effects on all living forms both wild animals and plants.
* **Non-recyclable waste**, two words plastic and electronic wastes. These are two kinds of environmental problems of recent times which have littered lakes, river and oceans. The best ways to avoid plastic from accumulating is to NOT buy packaged water, and NOT use plastic bags. For electronic do not burn a DVD, discard your old phone and get a new one, buy a new camera, iPod, or PlayStation.
* **Nuclear development**, Nuclear radiations are probably the deadliest of them all. They do not just affect you - they can affect your children and their children as well. Personally, I think the most alarming aspect of nuclear development is the prospective nuclear accidents that can take place. We do not need another Chernobyl disaster; we do not want another city facing the same fate as Hiroshima and Nagasaki. (Help save nature reports and global effects of air pollution page 32,Environmental issues in public health model five)

**Reference**

* Public health and health policy of South Sudan. Joseph MPH, Dip, Epid (FPH), FFPHFRIPH, Consultant in Public health and Assistant Director of public health Doncaster primary care trust.
* Help save nature. <http://helpsavenature.com/lists-of-environmental-problem>.
* Positive impacts of globalization, by: Anna Roberts Reviewed by: Jayne Thompson, LLB and LLM. Updated November 21/2018
* U.S. Environmental protection Agency. Health effects assessment for Asbestos, September 1984. EPA/540/1-86/069. Retrieved April 18, 2017.
* Toxicology program. Asbestos. In report on carcinogen. Fourteenth edition. U.S. department of health and human service, public health service, national toxicology program, 2016.
* European report on preventing elderly maltreatment, WHO/Europe, 2011.
* Environmental issues I public (health model five).
* A global response to elder abuse and neglect. Building primary health care capacity to deal with the problem worldwide; main reports. WHO headquarters, 2008?