



PHILIPPINE HEALTH ADVISORIES



Department of Health

National Center for Health Promotion
National Center for Disease Prevention and Control
Manila, Philippines
2012

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Foreword

The Department of Health (DOH) has identified common diseases in the country that occur more or less regularly every year. Thus, DOH has come up with this compilation of health advisories for easy reference. It contains basic information about each disease or condition, such as its transmission, signs and symptoms, and, most importantly, how it can be prevented.

Each of these health advisories has been meticulously designed and crafted to help our readers understand common diseases or conditions so that they will be armed with the correct and timely information. In turn, they may be able to take the proper action to safeguard their health.

We have also developed one-page materials for selected health-seeking behaviors we deem critical in the different stages of a person's life. Adoption of these behaviors will surely impact greatly on our people's health, thereby getting us closer to our vision of "*Kalusugan Pangkalahatan*" or Universal Health Care.

We are optimistic that this 2012 compilation of health advisories will keep the Filipino people well-informed so that they will be socially responsible for their own health.

Mabuhay tayong lahat!



A handwritten signature in black ink, which appears to read "ET Ona". The signature is stylized and fluid.

Enrique T. Ona, MD, FPCS, FACS
Secretary of Health

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Acknowledgments

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The Philippine Health Advisories was produced with support
from the World Health Organization.

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SECTION A
PHILIPPINE HEALTH ADVISORIES

Infectious Diseases

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Acute Respiratory Infection

Acute respiratory infection (ARI) is a leading cause of death in children under the age of 5 in developing countries. Pneumonia is the most serious of these infections but often can be treated with affordable antibiotics.

Cause

Multiple types of virus and bacteria

Mode of Transmission

Person-to-person by coughing, sneezing, or speaking

Signs and Symptoms

Cough accompanied by short rapid breathing, fever, difficulty of breathing, etc.

Treatment

- If antibiotic is needed, health workers must be consulted.
- Supportive measures include increased oral fluids to prevent dehydration, continued feeding to avoid malnutrition and anti-pyretics to reduce high fever.

Prevention and Control

Consult health professionals for available vaccines that help prevent ARI.

Vaccines are one of the most cost-effective preventive tools available and in recent years, meaningful progress has been made in using them to reduce ARI.



References

- The Acute Respiratory Infections Atlas. (2010). Preventing ARIs with Vaccines. Retrieved from http://www.ariatlas.org/prevention_diagnosis_treatment/preventing_aris_with_vaccines
- World Health Organization. (2011) Acute Respiratory Infection in Children http://www.who.int/fch/depts/cah/resp_infections/en/

Image from http://article.wn.com/view/2012/07/10/Whooping_cough_cases_prompt_warning_from_health_officials/



Influenza A (H1N1)

Another type of influenza virus, A (H1N1) virus can cause a highly contagious respiratory disease.

Cause

Viruses (influenza viruses) that infect the respiratory tract and result in nasal secretions, a barking-like cough, decreased appetite, and listless behavior

Mode of Transmission

Can easily spread from person-to-person through coughing or sneezing

Signs and Symptoms

Similar to the symptoms of flu, such as:

- Fever
- Headache
- Fatigue
- Muscle or joint pains
- Lack of appetite
- Runny nose
- Sore throat
- Cough
- Diarrhea, nausea, and vomiting reported in some cases

Treatment

- Oseltamivir or zanamivir are the recommended drugs to treat and or prevent infection with this virus. Consult a doctor before using these drugs to avoid resistance.
- If there are flu-like symptoms, consult the doctor immediately or report to proper health authorities.

Prevention

Observe proper personal hygiene:

- Cover your nose and mouth when coughing or sneezing.
- Wash hands regularly with soap and water, at least for 20 seconds. Or use alcohol-based hand sanitizers, especially after handling patients and specimen, before and after eating, after using the toilet, and as necessary.
- Avoid touching your eyes, nose or mouth. Germs spread this way.

Increase your body's resistance:

- Have at least 8 hours of sleep.
- Be physically active.
- Manage your stress.
- Drink plenty of fluids.
- Eat nutritious food, especially fruits and vegetables.

Practice social distancing:

- Avoid crowded places.
- Avoid close contact with sick people.
- Stay home if you are sick until you are free from symptoms to prevent the spread of the virus.

References

- Centers for Disease Control and Prevention. (2011). 2009 H1N1 Flu. Retrieved from [http:// www.cdc.gov/swineflu](http://www.cdc.gov/swineflu)
- Davis, Charles Patrick MD. (2011). Swine Flu (Swine Influenza A [H1N1] Virus). Retrieved from http://www.medicinenet.com/swine_flu/article.htm
- World Health Organization. (2011). Pandemic (H1N1) 2009. Retrieved from [http:// www.who.int/csr/disease/swineflu/en/](http://www.who.int/csr/disease/swineflu/en/)

Bird Flu (Avian Influenza)

Bird Flu or Avian Influenza is a contagious disease of livestock (chicken, ducks, birds), which may also cause severe infection in humans.

Cause

Influenza virus A (H5N1)

Mode of Transmission

Transmitted to humans through inhalation of or contamination with infected discharges or feces of sick chicken

Signs and Symptoms

- Fever
- Body weakness or muscle pain
- Cough
- Sore throat
- Sore eyes and/or diarrhea in some persons
- Difficulty of breathing in a week's time from onset in severe cases

Treatment

- Treatment of Bird Flu in humans is the same as for other influenza viruses. Antiviral drugs, such as oseltamivir, stop the progress of the illness if given within the first 2 days from the onset of fever.

Prevention

- Wash hands thoroughly with soap and water before and after handling live and dressed chicken.
- Cook chicken thoroughly.



- Do not catch, get near to, or keep in captivity wild birds.
- Do not handle sick or dead birds with bare hands.
- Use gloves or plastic material for the hands, facial masks, and goggles.
- Report to the nearest agricultural/veterinary office any unusual death or illness of chicken and other birds.
- Report to the nearest local health centers any case of respiratory illness with history of exposure to sick chickens and other birds.

References

- DOH Philippines. (2005). Health Advisory on Bird Flu (Avian Influenza).
- Nettleman, Mary D. (2011). Bird Flu (Avian Influenza, Avian Flu). Retrieved from http://www.medicinenet.com/bird_flu/article.htm.
- World Health Organization. Avian Influenza. (2011) Retrieved from http://www.who.int/influenza/human_animal.../en/

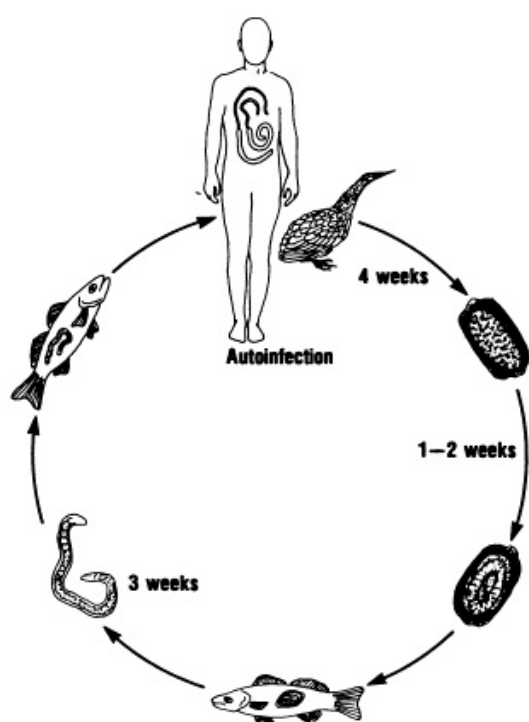
Image from Bureau of Animal Industry-Department of Agriculture

Capillariasis

Capillariasis is an intestinal parasitism. The worms can be seen in the small intestine of humans.

Cause

Small nematodes called *Capillaria philippinensis* that infect humans



Mode of Transmission

Can be acquired through consumption of infected raw or improperly cooked small freshwater fish (After eating infected fish, it takes at least about two weeks for the eggs to mature.)

Signs and Symptoms

- Abdominal pain
- Chronic diarrhea for more than two weeks
- Loss of appetite
- Weight loss
- Vomiting
- Swelling of the body
- Muscle wasting

Treatment

- Mebendazole 400 milligrams/day is given in divided doses for 20 days for new cases and 30 days for relapse cases.
- Eggs and parasites disappear from feces within 4 days and symptoms within a week.
- Albendazole has also been found effective in treating intestinal capillariasis using the same dosage as Mebendazole.

Prevention and Control

- Cook fish thoroughly before eating.
- Avoid eating raw fish.
- Use sanitary toilet for disposal of human waste.

References

- DOH Philippines. (2005). Health Advisory on Capillariasis.
- Centers for Diseases Control and Prevention. (2011) Parasites - Capillariasis (also known as Capillaria Infection) Retrieved from <http://www.cdc.gov/parasites/capillaria/>

Image from <http://www.ncbi.nlm.nih.gov/>

Chickenpox



Chickenpox is a highly contagious and common viral infection among children.

Cause

Varicella virus

Mode of Transmission

Easily passed between members of families and school mates through airborne particles, droplets in exhaled air, and fluid from the blisters or sores (Patients are contagious 5 days before and 5 days after the appearance of rashes/ blisters.)

Signs and Symptoms

- Appearance of reddish skin lesions, which later become blisters (vesicles) on the third to fourth day of fever
- Weakness
- Muscle and joint pains
- Sudden onset of fever

Treatment

- Chickenpox rashes will disappear within 1-2 weeks even without treatment.
- Give sponge bath or continuous cold compress on the head for fever.
- Warm shower or warm sponge bath daily is advisable. Do not rub the lesions.
- Give plenty of fruit juices and water to patient during waking hours.

Prevention and Control

- Avoid crowded areas during epidemics.
- Isolate the patient in a room, if possible, to prevent the spread of the disease to other members of the family.
- Vaccine is available as precautionary measure and as per doctor's advice.

References

- DOH Philippines. (2005). Health Advisory on Chickenpox.
- Mersch, John. (2011) Chickenpox. Retrieved from http://www.emedicinehealth.com/chickenpox/article_em.htm



Cholera

Cholera is an acute intestinal infection caused by ingestion of food or water contaminated with the bacterium *Vibrio cholerae*. It has a short incubation period, from less than 1 day to 5 days. The bacterium produces an enterotoxin that causes a copious, painless, watery diarrhea that can quickly lead to severe dehydration and death if treatment is not promptly given. In extreme cases, cholera is a rapidly fatal disease. A healthy individual may die within 2-3 hours if no treatment is provided.

Cause

Vibrio cholerae bacteria

Mode of Transmission

Eating food or drinking water contaminated with human waste infected with *Vibrio cholerae* bacteria

Signs and Symptoms

- Sudden onset of frequent painless watery stools
- Vomiting
- Rapid dehydration (e.g., sunken eyeballs, wrinkled and dry skin)

Treatment

- Replace lost body fluid by giving Oral Rehydration Solution (ORESOL) or a homemade solution composed of 1 teaspoon of salt, 4 teaspoons of sugar mixed in 1 liter of water.
- If diarrhea persists, consult health

workers or bring the patient to the nearest hospital.

Prevention and Control

- Drink only safe and clean water. If unsure, boil drinking water (Upon reaching boiling point, extend boiling for 3 or more minutes). Or do water chlorination.
- Keep food away from insects and rats by covering it.
- Wash and cook food properly.
- Dispose of human waste properly.
- Use toilet properly and clean toilet every day. Wash hands with soap and water after using toilet and before eating.
- Keep surroundings clean to prevent flies and other insects and rodents from breeding.
- A WHO pre-qualified oral cholera vaccine is available for travelers and people in endemic areas. It is given in two doses and offers protection for 3 years.



References

- Centers for Diseases Control and Prevention. (2011) Cholera. Retrieved from <http://www.cdc.gov/cholera>
- DOH Philippines. (2005). Health Advisory on Cholera.
- World Health Organization. (2011) Cholera. Retrieved from <http://www.who.int/topics/cholera/en>

Image from <http://talakayanatkalusugan.com/2011/04/15/cholera-outbreak-declared-in-philippine-island/>

Dengue

Dengue fever and dengue hemorrhagic fever are acute viral infections that affect infants, young children, and adults.

Cause

Bite of an *Aedes aegypti* mosquito infected with any one of the four dengue viruses

Mode of Transmission

Transmitted by a day-biting mosquito called *Aedes aegypti* and *Aedes albopictus* (These mosquitoes lay eggs in clear and stagnant water found in flower vases, cans, rain barrels, old rubber tires, etc. The adult mosquitoes rest in dark places of the house.)

Signs and Symptoms

- Sudden onset of high fever which may last from 2 to 7 days.
- Joint and muscle pain and pain behind the eyes
- Weakness
- Skin rashes
- Nosebleeding when fever starts to subside
- Abdominal pain
- Vomiting of coffee-colored matter
- Dark-colored stools
- Difficulty of breathing

Treatment

- Do not give aspirin for fever.
- Give sufficient amount of water or rehydrate a dengue suspect.

- If fever or symptoms persist for 2 or more days, bring the patient to the nearest hospital.

Prevention and Control

Follow the 4-S against Dengue:

1. Search and Destroy

- Cover water drums and pails.
- Replace water in flower vases once a week.
- Clean gutters of leaves and debris.
- Collect and dispose all unusable tin cans, jars, bottles and other items that can collect and hold water.



2. Self-Protection Measures

- Wear long pants and long sleeved shirt.
- Use mosquito repellent every day.

3. Seek Early Consultation

Consult the doctors immediately if fever persists after 2 days and rashes appears.

4. Say Yes to Fogging When There is an Impending Outbreak or a Hotspot

References

- DOH Philippines. (2005). Health Advisory on Dengue.
- World Health Organization. (2011) Dengue haemorrhagic fever. Retrieved from <http://www.who.int/csr/disease/dengue/en>.

Image from <http://www.dilg.gov.ph/news.php?id=32&newsCategory=Central>

Diarrhea

Diarrhea is an increase in the frequency of loose or liquid bowel movements.

Cause

It is usually a symptom of gastrointestinal infection, which can be caused by a variety of bacterial, viral, and parasitic organisms.

Mode of Transmission

Ingestion of contaminated food and water

Signs and Symptoms

- Passage of watery stools at least 3 times a day
- Excessive thirst
- Sunken eyeballs
- Sunken fontanel in infants

Treatment

- Give Oral Rehydration Solution (ORESOL) or rice soup (*am*) to replace lost body fluid.



- Continued feeding is important.

Prevention and Control

- Drink water only from safe sources. If unsure, boil water for 3 minutes or do water chlorination.
- Eat only foods that are well cooked and properly prepared.
- Avoid eating street-vended food.
- Keep food away from insects and rats by covering them.
- Wash fruits and vegetables with clean water before eating or cooking.
- Use toilet when defecating.
- Wash hands before eating and after using the toilet.

References

- Cunha, John P. (2011). Diarrhea. Retrieved from http://www.emedicinehealth.com/diarrhea/article_em.htm
- DOH Philippines. (2005). Health Advisory on Diarrhea.
- Marks, Jay W. (2011). Diarrhea. Retrieved from <http://www.medicinenet.com/diarrhea/article.htm>

Image from <http://sgtt.vn/Khoe-va-Vui/152476/ORESOL-don-gian-nhung-ky-dieu.html>

Diphtheria

A bacterial (toxin-related) disease, it is manifested in acute pharyngitis, acute naso pharyngitis, or acute laryngitis with a pseudomembrane formation in the throat.

Cause

Corynebacterium diphtheria

Mode of Transmission

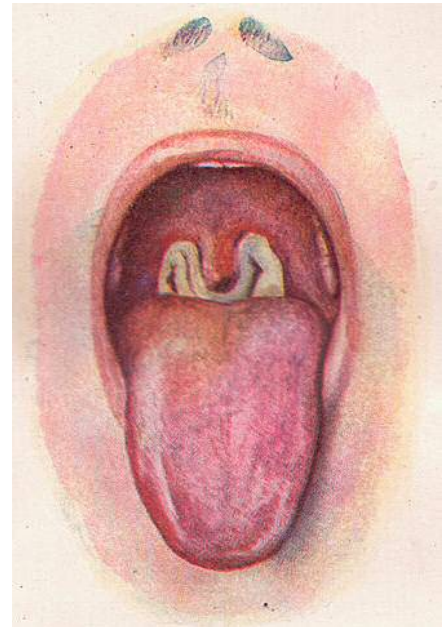
Can be spread by close physical and respiratory (droplets) contact; transmission increased in crowded areas, such as schools, hospitals, households (Incubation period is 2-5 days or longer. It may last for 2-3 weeks or shorter with antibiotic treatment.)

Signs and Symptoms

- Sore throat and hoarseness
- Painful swallowing
- Swollen glands (enlarged lymph nodes) in the neck
- Thick, gray membrane covering the throat and tonsils
- Difficulty of breathing or rapid breathing
- Nasal discharge
- Fever and chills
- Malaise

Treatment

- Antitoxin, injected into a vein or muscle (Before giving antitoxin, doctors may perform skin allergy tests to make sure that the infected person does not have an allergy to the antitoxin.)



- Antibiotics, such as penicillin or erythromycin, help kill bacteria in the body, clearing up infections. Antibiotics reduce to just a few days the length of time that a person with diphtheria is contagious.

Prevention

Have infants immunized with three doses of DPT (at ages 6 weeks old, 10 weeks old, and 14 weeks old).

References

- Doerr, Steven. (2011) Diphtheria. Retrieved from <http://www.medicinenet.com/diphtheria/article.htm>
- DOH Philippines. (2005). Health Advisory on Diphtheria
- World Health Organization. (2011). Diphtheria. Retrieved from <http://www.who.int/mediacentre/factsheets/fs089/en/>

Image from <http://www.flickr.com/photos/14277117@N03/3796073312>

Ebola

The Ebola virus belongs to the Filoviridae family (filovirus) and is comprised of five distinct species: Zaïre; Sudan; Côte d'Ivoire; Bundibugyo; and Reston. Subtypes Zaire, Sudan, and Ivory Coast can cause hemorrhagic symptoms; Reston does not.

Reston was previously found among Philippine monkeys. The virus was found in sick pigs in the Philippines. Ebola Reston has not caused illness to humans to date but Ebola has.

Cause

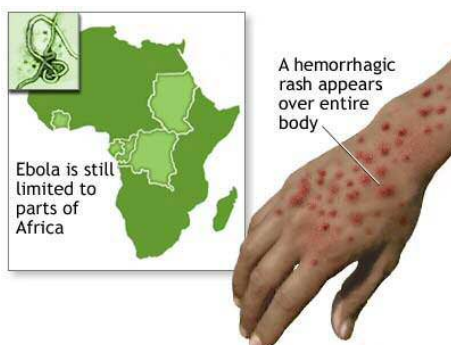
Ebola virus subtype Reston

Mode of Transmission

Direct contact with the blood, secretions, organs or other body fluids of infected persons.

Signs and Symptoms

- Sudden onset of fever
- Intense weakness
- Muscle pain
- Headache
- Sore throat
- Vomiting
- Diarrhea
- Rash
- Impaired kidney and liver function
- Internal and external bleeding



Treatment

There is no standard treatment.

Prevention and Control

- Wear protective clothing, such as masks, gloves, gowns, and goggles.
- Use infection-control measures, including complete equipment sterilization; and isolate patients from contact with unprotected persons.

The aim of all of these techniques is to avoid any person's contact with the blood or secretions of any patient. If a patient with Ebola HF dies, it is equally important that direct contact with the body of the deceased patient be prevented.

References

- World Health Organization. (2011). Ebola haemorrhagic fever. Centers for Disease Control and Prevention.(2009). Questions and Answers about Ebola Hemorrhagic Fever. Retrieved from <http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/ebola/qa.htm>
- World Health Organization. (2008) Ebola haemorrhagic fever. Retrieved from <http://www.who.int/mediacentre/factsheets/fs103/en/>

Image from <http://ka1marti.wordpress.com/>

Filariasis

Filariasis is commonly known as “elephantiasis.”

Cause

Parasitic worms known as filarial nematode (Bancroftian or Brugian filariasis)

Mode of Transmission

Parasitic worms transmitted to humans through the bite of an infected mosquito

Signs and Symptoms

- Pain and swelling of the breast, vagina, scrotum, legs, and arms
- Fever
- Cough
- Chills
- Wheezing

Treatment

- Selective treatment with DEC (Diethylcarbamazine Citrate) is given to people with clinical manifestations of the disease.
- Mass treatment of the people living in established endemic areas is carried out.
- Medicines (DEC and albendazole) are given once a year to 2 years and above age group for a minimum of 5 years.

Prevention

- Wear long-sleeved shirt and long pants when working in farms or areas where filariasis is endemic.
- Sleep under a mosquito net or use mosquito repellent.



References

- BetterMedicine (2011). Lymphatic Filariasis. Retrieved from <http://www.bettermedicine.com/article/lymphatic-filariasis>
- DOH Philippines. (2005). Health Advisory on Filariasis.
- World Health Organization. (2011). Filariasis. Retrieved from <http://www.who.int/topics/filariasis/en>

Image from <http://dermaamin.com/site/atlas-of-dermatology/6-f/539-filariasis-.html>



Hand, Foot, and Mouth Disease

Hand, foot, and mouth disease (HFMD) is a common viral illness of infants and children. It should not be confused with foot-and-mouth (also called hoof-and-mouth) disease of cattle, sheep, and swine. Infected individuals are most contagious during the first week of their illness. HFMD cannot be contracted from pets or animals. Incubation period is 2-14 days



Cause

A virus of the family Picornaviridae, genus *Aphthovirus*

Mode of Transmission

Spreads by contact with nose and throat discharges, saliva of infected persons, or after touching contaminated objects

Signs and Symptoms

- Fever
- Sore throat
- Feeling of being unwell (malaise)
- Painful, red, blister-like lesions on the tongue, gums, and inside of the cheeks
- Red rash, without itching but sometimes with blistering, on the palms, soles, and sometimes the buttocks
- Irritability in infants and toddlers
- Loss of appetite

Treatment

- Treatment is directly toward relief of symptoms (fever and sore throat).
- There is no specific treatment. Signs and symptoms usually clear up in 7-10 days.
- A topical oral anesthetic may help relieve the pain of mouth sores.
- Over-the-counter pain medications other than aspirin, such as acetaminophen or ibuprofen, may help relieve general discomfort.

Prevention and Control

- There is no specific way to prevent the infection. Good hygiene (e.g., proper handwashing) can decrease the risk of spreading the disease.
- Disinfect premises and all infected materials (implements, cards, clothes, etc.).

References

- DOH Philippines. (2005). Health Advisory on Foot and Mouth Disease.
- Mersch, John. (2011). Hand Foot and Mouth (HFMD) Disease. Retrieved from http://www.medicinenet.com/hand-foot-and-mouth_syndrome/article.htm

Image from <http://www.empowher.com/media/reference/hand-foot-and-mouth-disease>

Hepatitis A

Hepatitis A, one of the oldest diseases known to humankind, is a very infectious viral disease.

Cause

Hepatitis A virus (HAV)

Mode of Transmission

Ingestion of food contaminated with human waste and urine of persons who have Hepatitis A

Signs and Symptoms

- Fever
- Flu-like symptoms: weakness, muscle and joint aches, loss of appetite, dizziness
- With or without vomiting
- Tiredness or fatigue
- Abdominal discomfort (pain in the liver area)
- Dark/brownish urine
- Jaundice

Symptoms may be so mild that they go unnoticed.



Symptoms usually develop between 2 and 6 weeks after infection.

Treatment

- There is no specific medicine to cure the patient or shorten the course of illness.
- Sick persons should be isolated, advised to rest, take plenty of fluids, and avoid fatty foods.
- Patients who fail to take fluids or are too weak to eat are sometimes brought to hospital for intravenous administration of fluids and vitamins.

Prevention and Control

- Wash hands after using the toilet, before preparing food, and before eating.
- Dispose human waste properly.
- Thoroughly cook oysters, clams, and other shellfish for 4 minutes or steam for 1 minute and 30 seconds.
- Practice safe handling and storage of food and water.
- Get Hepatitis A vaccine.

References

- DOH Philippines. (2005). Health Advisory on Hepatitis A.
- World Health Organization. (2011). Hepatitis. Retrieved from <http://www.who.int/topics/hepatitis/en>

Image from <http://www.gihealth.com/html/education/hepatitisA.html>



Hepatitis B

Hepatitis B is a viral disease which can be acute or chronic liver disease. Chronic hepatitis B infection may lead to liver cancer.

Hepatitis B may also lead to the following complications:

- Chronic hepatitis
- Cirrhosis
- Liver failure
- Liver cancer

Cause

B type of Hepatitis virus

Mode of Transmission

May be spread through the following:

- From mother to child during birth;
- Through blood transfusion;
- Through sharing of unsterilized needles, knives, or razors; and
- Through sexual intercourse.

Signs and Symptoms

- Weakness
- Stomach upset
- Dark urine or very pale stools
- Jaundice



Treatment

None

Prevention

1. Immunization of infants with 3 doses of Hepatitis B vaccine at preferably using 0, 1, and 6 months regimen (at birth, 1 month old, and at 6 months) or at birth, 4 weeks, and 8 weeks old.
2. Hepatitis B immunoglobulin is given in addition to the birth dose of Hepatitis B vaccine to newborns delivered from mothers who are known to Hepatitis B surface antigen reactive.
3. Use of safe/clean injection and equipments/supplies
4. Vaccination of adults in high-risk settings such as healthcare workers and those with multiple partners practicing unprotected sex such as men having sex with other men and prostituted women
5. Correct and consistent use of condoms

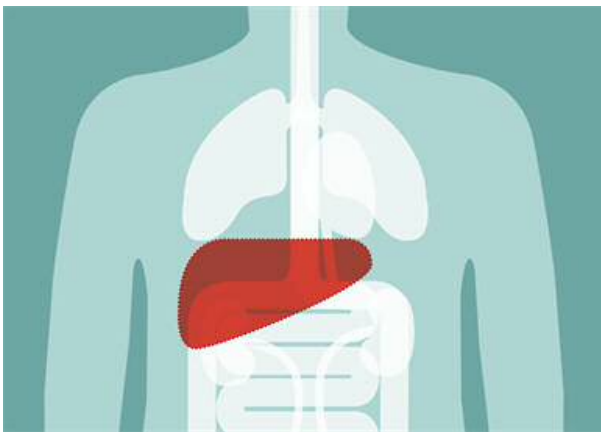
References

- DOH Philippines. (2005). Health Advisory on Hepatitis B.
- DOH Guidelines on Post-Exposure Management for HIV, Hepatitis B and C
- World Health Organization. (2011). Hepatitis. Retrieved from <http://www.who.int/topics/hepatitis/en>

Image from <http://www.health-healths.com/hepatitis-b-2>

Hepatitis C

Hepatitis C is a disease of the liver. Most people who are infected with hepatitis C do not have any symptoms for years. The virus stays in the liver and causes chronic liver inflammation, cirrhosis, or liver cancer.



Cause

Hepatitis C virus

Mode of Transmission

Usually spreads through contact with blood products, like accidentally being stuck with a dirty (used) needle, using IV drugs and sharing needles, or getting blood before 1992

Signs and Symptoms

- Headache
- Nausea and vomiting
- Abdominal pain
- Jaundice (the skin turns yellow)
- Weakness and fatigue
- Dark yellow urine, light-colored stools, and yellowish eyes

Treatment

Medicines, such as interferon and ribavirin, do not cure hepatitis C, but they do make people feel better and they may prevent future liver problems.

Prevention

- Use a condom during sexual activity to protect yourself and your partner from contracting Hepatitis C.
- Do not share injecting device/paraphernalia with anyone.
- Wear gloves if you have to touch anyone's blood.
- Do not use an infected person's toothbrush, razor, or anything else that could have blood on it.
- Make sure any tattooing or body piercing is done with clean tools.
- There is no vaccine for Hepatitis C.

References

- DOH Philippines. (2005). Health Advisory on Hepatitis C.
- World Health Organization. (2011). Hepatitis. Retrieved from <http://www.who.int/topics/hepatitis/en>

Image from http://www.gaynewspulse.com/wp-content/uploads/2013/02/184_hep_c_png.png



HIV/AIDS

AIDS or Acquired Immunodeficiency Syndrome is a chronic, sexually transmitted disease. Acquired means that the disease is not hereditary but it develops after birth from contact with a disease-causing agent (in this case, HIV).

Immunodeficiency means that the virus weakens the immune system, causing the body's inability to fight diseases.

Syndrome refers to a group of symptoms that indicate or characterize a disease.

Cause

Human immunodeficiency virus (HIV)

Mode of Transmission

Spreads primarily by:

- Having unprotected sex with a person who has HIV
- Having multiple sex partners or the presence of other sexually transmitted diseases (STDs) that can increase the risk of infection during sex
- Sharing needles, syringes, rinse water, or other equipment used to prepare illicit drugs for injection
- Being born to an infected mother (HIV can be passed from mother to child during pregnancy, birth, or breastfeeding.)

Signs and Symptoms

Early symptomatic infection

- Fever
- Fatigue
- Swollen lymph nodes

- Diarrhea
- Weight loss
- Cough
- Shortness of breath

Primary infection (flu-like illness) occurs 3-6 weeks after acquiring infection in almost 50% of newly infected people:

- Fever
- Muscle soreness
- Rash
- Headache
- Sore throat
- Mouth or genital ulcers
- Swollen lymph glands, mainly on the neck
- Joint pain
- Night sweats
- Diarrhea

Treatment

There is no cure for HIV/AIDS, but there are medications that can slow down the progression of the disease.

Prevention

- Have sexual intercourse only within a long-term, mutually monogamous relationship with an uninfected partner.
- Use male latex condoms.
- Use clean needle.

References

- Centers for Disease Control and Prevention. 2006. <http://www.cdc.gov/hiv/resources/qa/definitions.htm>
- Mayo Clinic. 2012. HIV/AIDS.
- World Health Organization. 2012. HIV AIDS.



Influenza

Influenza, commonly called the flu, is a viral infection that attacks the respiratory system. This type of flu is not the same as the stomach “flu” virus that causes diarrhea and vomiting. Young children, older adults, pregnant women, and people who have weakened immune system are highly susceptible to flu. Incubation period is 1-3 days.

Cause

- Influenza virus (A, B, or C)

Mode of Transmission

- Entry of the Influenza virus (A, B, or C) into the respiratory tract when someone coughs or sneezes
- Contact with the surfaces, material, and clothing contaminated with discharges of an infected person

Signs and Symptoms

- Fever of at least 38°C
- Headache
- Runny nose, sore throat, cough, or other respiratory manifestations
- May or may not have muscle or joint pains

Treatment

- Use of antiviral agents, such as oseltamivir (Tamiflu) or zanamivir (Relenza), within the first 2 days may shorten the illness and help prevent serious complications.
- Have adequate rest.
- Increase intake of oral fluids and nutritious foods.

- Take paracetamol for fever. Aspirin should not be given to children.
- Antibiotics should be given only to complications of influenza, such as pneumonia or otitis media.



Prevention

- Give influenza vaccination preferably annually.
- Minimize contact with a person who has influenza.
- Avoid crowded places.
- Distance yourself by at least 1 meter from people who are coughing or have influenza.
- Cover mouth and nose when sneezing or coughing to prevent spread of the virus.
- Wash hands frequently with soap and water.

References

- DOH Philippines. (2005). Health Advisory on Influenza.
- World Health Organization. (2011). Influenza. Retrieved from <http://www.who.int/topics/influenza/en>

Image from http://article.wn.com/view/2011/12/30/Potent_strain_of_influenza_gains_a_foothold_in_BC/



Japanese Encephalitis

Japanese encephalitis is a disease caused by an arbovirus, a large group of viruses that are spread by certain invertebrate animals (arthropods), most commonly blood-sucking insects, such as mosquitoes. The virus can infect humans, most domestic animals, birds, bats, snakes, and frogs. It affects the central nervous system and causes severe complications and even death.



Cause

Flavivirus (This type of virus can affect both animals and humans. The virus is passed on to humans from animals through the bite of an infected mosquito.)

Mode of Transmission

Bite of an infected mosquito, *Culex tritaeniorhynchus*, that lives in rural rice-growing and pig-farming regions (Transmission principally occurs in rural agricultural areas, often associated with rice cultivation and flooding irrigation.)

Signs and Symptoms

Most infected persons develop mild symptoms or no symptoms at all. Flu-like illness symptoms usually appear 6-8 days after the bite of an infected mosquito:

- Fever
- Chills

- Tiredness
- Headache
- Nausea and vomiting
- Confusion and agitation can occur in the early stage

Treatment

- There is no specific treatment for Japanese encephalitis. Only the symptoms and complications may be treated.
- Antibiotics are not effective against viruses, and no effective anti-viral drugs have been discovered.

Prevention

- Get vaccinated, especially before traveling to Japanese Encephalitis endemic areas.
- Avoid mosquito bites.
 - Minimize outdoor activities during the cooler hours at dusk and dawn when mosquitoes are active.
 - Use mosquito repellent on exposed skin.
 - Stay in airconditioned or well-screened rooms.
 - Use mosquito nets.

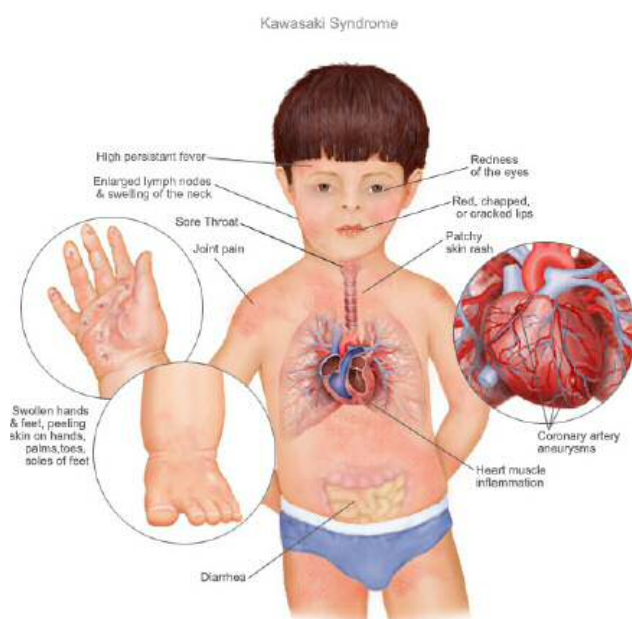
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- Centers for Disease Control and Prevention. (2011) Japanese Encephalitis. Retrieved from <http://wwwnc.cdc.gov/travel/yellowbook/2012/chapter-3-infectious-diseases-related-to-travel/japanese-encephalitis.htm>
- DOH Philippines. (2005). Health Advisory on Japanese Encephalitis.

Image from http://tehelka.com/story_main16.asp?filename=Ne011406Images05_06.asp

Kawasaki Disease

This is a non-specific disease that affects the mucus membranes, lymph nodes, walls of the blood vessels, and the heart. Kawasaki disease can cause inflammation of blood vessels (vasculitis) of the coronary arteries and subsequent coronary artery aneurysms, that can lead to myocardial infarction and irregular heart beat (arrhythmias).



There is no test to affirm the disease. A doctor makes diagnosis from the symptoms and a few characteristic laboratory findings, such as high platelet count (cells that help blood clot) in the blood.

Cause

No definite cause identified (It appears that the vasculitis is brought about by an exaggerated immune response.)

Mode of Transmission

Little evidence of person-to-person transmission

Signs and Symptoms

- High persistent fever
- Reddening of the whites of the eyes
- Red mucus membranes of the mouth
- Red cracked lips
- “Strawberry tongue”
- Swollen lymph nodes
- Skin rashes

Treatment

- Administer intravenous gamma globulin in high doses. Marked improvement is usually noted within 24 hours of treatment with IV gamma globulin.
- Consult your doctor if a high-grade fever persists for more than 24 hours, unresponsive to acetaminophen or ibuprofen.
- Start treatment as soon as the diagnosis is made to prevent damage to the heart and its arteries.

Prevention

There are no known measures that will prevent this disorder.

References

- DOH Philippines. (2005). Health Advisory on Kawasaki Disease.
- Shiel, William C. Jr. (2011). Kawasaki Disease. Retrieved from http://www.medicinenet.com/kawasaki_disease/article.htm

Image from <http://ukhamba.web.officelive.com/ConditionsandDiseases.aspx>



Leprosy

Leprosy is a chronic, mildly communicable disease that mainly affects the skin, the peripheral nerves, the eyes, and mucosa of the upper respiratory tract.

Cause

Mycobacterium leprae bacillus

Mode of Transmission

Transmitted via droplets, from the nose and mouth, during close and frequent contacts with untreated cases

Signs and Symptoms

3 Cardinal Signs of Leprosy

1. *Skin patch with loss of sensation*

The skin lesion can be single or multiple, usually less pigmented than the surrounding normal skin. Sometimes the lesion is reddish or copper-colored.



2. *Enlarged peripheral nerve*

A thickened nerve is often accompanied by other signs as a result of damage to the nerve. These may be loss of sensation in the skin and weakness of muscles supplied by the affected nerve.

3. *Positive slit-skin smear*

In a small proportion of cases, rod-shaped, red-stained leprosy bacilli, which are diagnostic of the disease, may be seen in the smears taken from the affected skin

when examined under a microscope after appropriate staining.

Treatment

Multidrug therapy (MDT) treatment

- Combination of rifampicin, clofazimine, and dapsone for Multibacillary (MB) leprosy patients
- Rifampicin and dapsone for Paucibacillary (PB) leprosy patients

Treatment of leprosy with only one antileprosy drug will always result in development of drug resistance to that drug.

Prevention and Control

- Treat all leprosy cases to prevent spread of infection.
- Avoid direct contact with untreated patients (especially young children).
- Practice personal hygiene.
- Maintain body resistance by healthful living.
- Practice good nutrition.
- Have enough rest and exercise.
- Keep environment clean.

References

- Davis, Charles Patrick. (2011). Leprosy (Hansen's Diseases). Retrieved from www.medicinenet.com/leprosy/article.htm
- DOH Philippines. (2005). Health Advisory on Leprosy.
- DOH-NLCP. (2002). National Leprosy Control Program Manual of Procedures. Manual of Procedures.
- World Health Organization. (2011). Leprosy. Retrieved from www.who.int/mediacentre/factsheets/fs101/en
- World Health Organization. (2011). Leprosy Today. Retrieved from www.who.int/lep/

Image from McDougall, AC and Yuasa, Y. (2002). A New Atlas of Leprosy.

Leptospirosis

Leptospirosis is a bacterial infection transmitted by many animals, such as rodents and other vermin. Waste products (e.g., urine and feces) of an infected animal, especially rats, contaminate the soil, water, and vegetation.

Cause

Leptospira spirochetes bacteria

Mode of Transmission

Ingesting contaminated food or water or when broken skin or open wounds and mucous membrane (eyes, nose, sinuses, mouth) come in contact with contaminated water (usually flood water) or soil (Incubation period of bacteria is 7-10 days.)



Signs and Symptoms

- Fever
- Non-specific symptoms of muscle pain, headache
- Calf-muscle pain and reddish eyes in some cases

- Severe cases resulting in liver involvement, kidney failure, or brain involvement (Thus some cases may have yellowish body discoloration, dark-colored urine and light stools, low urine output, severe headache.)

Treatment

- Take antibiotics duly prescribed by a physician.
- Early recognition and treatment within 2 days of illness prevents complications of leptospirosis, so early consultation is advised.

Prevention and Control

- Avoid swimming or wading in potentially contaminated water or flood water.
- Use proper protection, like boots and gloves, when work requires exposure to contaminated water.
- Drain potentially contaminated water when possible.
- Control rodents in the household by using rat traps or rat poison and maintaining cleanliness in the house.

References

- Centers for Disease Control and Prevention. (2011). Leptospirosis. Retrieved from <http://www.cdc.gov/>
- Cunha, John P. (2011). Leptospirosis. Retrieved from <http://www.medicinenet.com/leptospirosis/article.htm>
- DOH Philippines. (2012). Health Advisory on Leptospirosis.

Image from <http://www.tribuneonline.org/metro/20091025met2.html>

Mad Cow Disease

A variant *Creutzfeldt-Jakob* disease in humans, it affects the brain and the nervous system. It takes 10-30 years after exposure (eating contaminated meat) before signs and symptoms appear.

Cause

A proteinaceous particle called “prion” acquired by eating meat/meat products from a cow with Bovine Spongiform Encephalopathy (BSE) or Mad Cow Disease

Mode of Transmission

Ingestion of contaminated meat and meat products

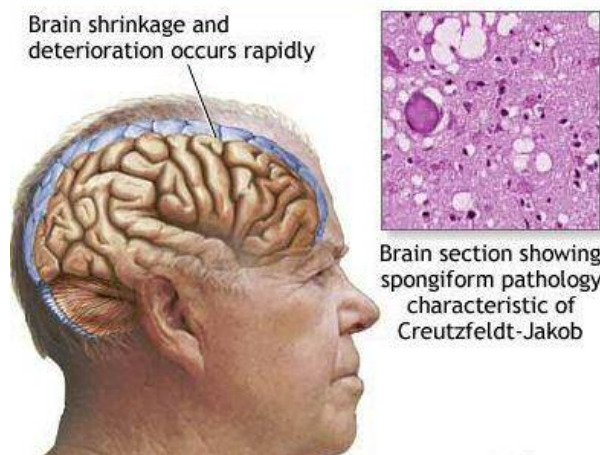
Signs and Symptoms

Initial Stage

- Insomnia
- Depression
- Confusion
- Personality changes
- Problems with memory and coordination
- Forgetfulness

Stage of Progression

- Rapid and progressive dementia
- Involuntary and irregular jerky movements
- Worsening sight
- Muscular weakness
- Problems with speech



Final Stage

- Loss of all mental and physical functions
- Paralysis
- Coma
- Death from other causes

Treatment

Currently, there is no effective treatment available.

Prevention

Do not eat meat/meat products from countries with reported cases of Bovine Spongiform Encephalopathy (BSE).

References

- Centers for Disease Control and Prevention. (2011). BSE (Bovine Spongiform Encephalopathy, or Mad Cow Disease) Retrieved from <http://www.cdc.gov/ncidod/dvrd/bse/>
- DOH Philippines. (2012). Health Advisory on Mad Cow Disease.

Image from <http://www.rawfoodlife.com/scienceofprions.html>

Malaria

Malaria is a serious and sometimes fatal disease caused by a parasite that commonly infects a certain type of mosquito which feeds on humans. Although malaria can be a deadly disease, illness and death from malaria can usually be prevented.

Cause

Protozoan parasite called *Plasmodium* (In the Philippines, there are four main species of malaria-causing *Plasmodium*: *P. falciparum*, *P. vivax*, *P. malariae*, and *P. ovale*. Infection with *P. knowlesi* has also been identified in the province of Palawan in 2010.)

Mode of Transmission

Transmitted through the bite of an infected female *Anopheles sp.* mosquito, which usually bites during nighttime

Signs and Symptoms

- Chills
- High-grade fever
- Severe headache
- Vomiting

Treatment

- Uncomplicated *P. falciparum*
 - First-Line: Artemether-Lumefantrine + Primaquine
 - Second-Line: Quinine Sulfate + Doxycycline/Tetracycline/Clindamycin
- Complicated *P. falciparum*: Quinine Dihydrochloride Infusion + Doxycycline/Tetracycline/Clindamycin

- *Plasmodium vivax* or *Plasmodium ovale*: Chloroquine + Primaquine
- *Plasmodium malariae*: Chloroquine + Primaquine

Prevention and Control

- Use long-lasting insecticidal mosquito nets, especially during nighttime.
- Wear long-sleeved clothing and pants.
- Use mosquito repellents/coils and screens on doors and windows.
- Clear hanging branches of trees along streams.
- Have your blood examined if you have the signs and symptoms of malaria.
- Follow the advice of health workers on how to take anti-malaria drugs.



References

- Centers for Disease Control and Prevention. (2011). Malaria. Retrieved from <http://www.cdc.gov/MALARIA>
- DOH Philippines. (2012). Health Advisory on Malaria.
- Malaria Manual of Operations
- Malaria Medium Term Development Plan
- 2009 Revised Malaria Chemotherapy
- World Health Organization. (2011). Malaria. Retrieved from <http://www.who.int/topics/malaria/en/>

Image from <http://blog.christianitytoday.com/images/2009/04/world-malaria-day-1.html>

Measles

Measles is a highly contagious respiratory disease caused by a virus.

Cause

A virus in the paramyxovirus family, which normally grows in the cells that line the back of the throat and lungs



Mode of Transmission

Easily spreads from person-to-person by sneezing, coughing, and close personal contact

Signs and Symptoms

- Cough
- Runny nose
- Red eyes/ conjunctivitis
- Fever
- Blotchy rash lasting for more than 3 days

Complications

- Diarrhea
- Otitis media (middle ear infection)

- Pneumonia
- Encephalitis
- Malnutrition
- Blindness

Treatment

- Nutritional support and oral rehydration are important to increase body resistance and replace lost body fluids caused by coughing, diarrhea, and perspiration.
- Take antibiotics as prescribed by physician to treat infections.
- Give supplementation to infants and children diagnosed with measles.



Prevention

- Immunize infants with measles vaccine at 9 months old.
- Give Vitamin A supplementation during routine measles vaccination.

References

- Centers for Disease Control and Prevention. (2011). Measles. Retrieved from <http://www.cdc.gov/measles/>
- DOH Philippines. (2005). Health Advisory on Measles.
- Mayo Clinic. (2011). Measles. Retrieved from <http://www.mayoclinic.com/health/measles/DS00331>
- World Health Organization. (2011). Measles. Retrieved from <http://www.who.int/mediacentre/factsheets/fs286/en/>

Image from <http://sarcoidosistreatments.com/measles-symptoms/>

Meningococchemia

Meningococchemia is an acute and potentially life-threatening bacterial infection of the bloodstream. The bacteria frequently live in a person's upper respiratory tract without causing visible signs of illness.

Cause

Neisseria meningitidis bacteria

Mode of Transmission

Can be spread from person-to-person through respiratory droplets from coughing, sneezing, kissing, or sharing foods, drinks, and utensils

Signs and Symptoms

- Fever
- Cough, sore throat, other respiratory symptoms
- Pinpoint rashes, which become wider and appear like bruises starting from the legs and arms (large maplike bruise-like patches)
- Severe skin lesions, which may lead to gangrene
- Unstable vital signs
- May or may not have signs of meningitis, such as stiff neck, convulsion (in some cases), delirium, altered mental status, and vomiting



Treatment

- Early recognition of meningococcal infection and prompt treatment with penicillin greatly improve chances of survival.
- Immediately consult the doctor if you are in areas where there are meningococchemia cases. Consult also if you: have been to these places in the past 10 days; and manifest fever and other signs and symptoms mentioned above.

Prevention and Control

- If part of a high-risk population, have yourself immunized with a meningococcal conjugate vaccine (per doctor's advice).
- Avoid crowded places.
- Avoid close contacts with meningococchemia patients.
- Increase resistance by having healthy diet, regular exercise, and adequate rest/sleep. Do not drink alcohol and do not smoke.
- Maintain clean environment/surroundings.
- Do not share utensils or anything else that has been in the mouth of an infected person.
- Wash hands frequently with soap and water.

References

- DOH Philippines. (2012). Health Advisory on Meningococchemia.
- Medline Plus. (2011). Meningococchemia. Retrieved from <http://www.nlm.nih.gov/medlineplus/ency/article/001349.htm>

Image from <http://textbookofbacteriology.net/themicrobialworld/meningitis.html>

Paragonimiasis

This is a food-borne parasitic disease of man known as lung fluke disease.

Cause

Parasite *Paragonimus westermani* (PW), which can be found in freshwater or mountain crabs

Mode of Transmission

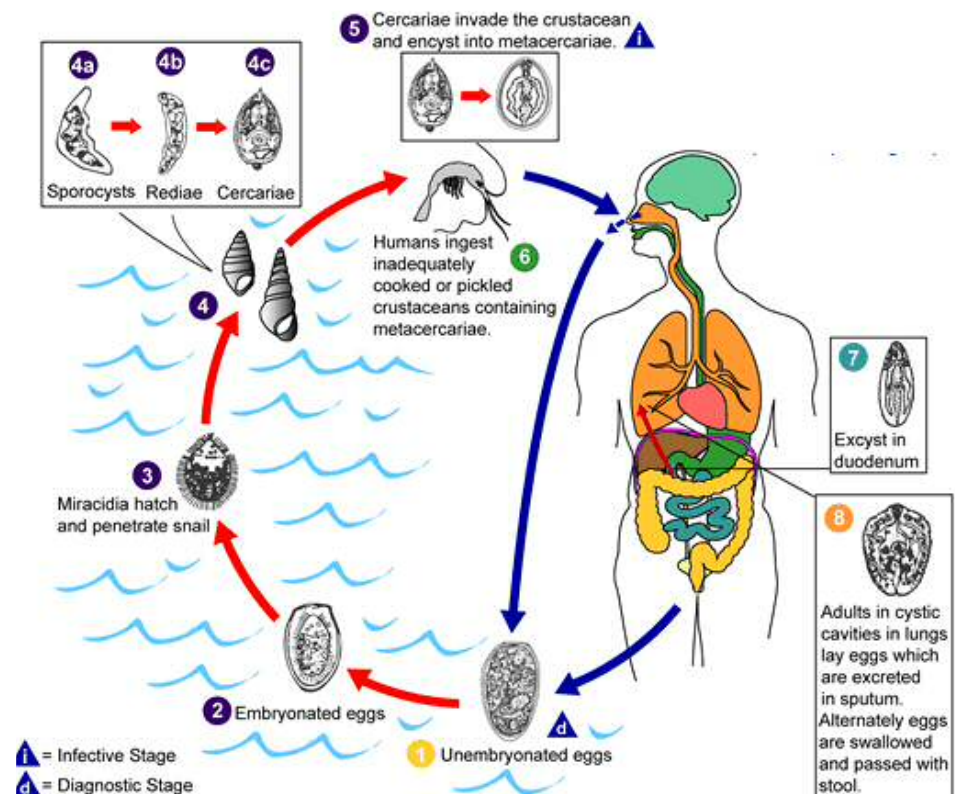
Infection from eating raw or undercooked freshwater or mountain crabs and from using contaminated utensils

Signs and Symptoms

- Early stages of the infection usually asymptomatic
- Heavily infected patients may suffer from:
 - Dry cough
 - Blood stained or rust-colored sputum with foul fish odor
 - Chest/backpain
 - PTB-like signs not responding to anti-TB medications

Treatment

A drug called Praziquantel is given.



Prevention

- Cook crabs thoroughly.
- Dispose of sputum and human waste properly.
- Control snail population; snails serve as hosts to the parasite.
- Treat cases.

References

- DOH Philippines. (2005). Health Advisory on Paragonimiasis.
- The Merck manual. (2011) Paragonimiasis (Oriental Lung Fluke Infection; Endemic Hemoptysis). Retrieved from http://www.merckmanuals.com/professional/infectious_diseases/trematodes_flukes/paragonimiasis.html

Image from <http://dpd.cdc.gov/dpdx/html/Paragonimiasis.htm>

Pertussis

Pertussis, also known as whooping cough, is a highly contagious bacterial disease. It is highly contagious in the early catarrhal stage, before paroxysmal cough. Incubation period is usually 7 days but it ranges from 5 to 15 days.

Cause

Bordetella pertussis bacteria

Mode of Transmission

Acquired primarily through direct contact with discharges from respiratory mucus membranes of infected persons (The bacteria may be spread through droplets and indirect contact with articles freshly soiled with the discharges of infected persons.)

Signs and Symptoms

- Cough persisting 2 or more weeks
- Fits of coughing
- Cough followed by vomiting

Treatment

Antibiotics may shorten the period of communicability from 7 days after exposure to 3 weeks after onset of typical paroxysms to only 5-7 days after onset therapy.

Prevention

Three primary immunization doses of DTaP (diphtheria, tetanus, and acellular pertussis vaccine) confer immunity to pertussis. Booster doses are recommended to be given after 1 year old, 4-6 years old, and at 11 years old.



References

- DOH Philippines. (2005). Health Advisory on Pertussis.
- Kidshealth. (2011). Whooping Cough (Pertussis). Retrieved from http://kidshealth.org/parent/infections/lung/whooping_cough.html
- World Health Organization. (2011). Pertussis. Retrieved from <http://www.who.int/topics/pertussis/en/>

Image from <http://www.onlinemedicinetips.com/disease/p/pertussis/Pertussis-Symptoms.html>



Poliomyelitis

Polio is a contagious viral illness that, in its most severe form, causes paralysis, difficulty of breathing, and sometimes death. A suspect case of polio is defined as any patient below 15 years of age with acute flaccid paralysis including those diagnosed to have Guillain- Barre Syndrome for which no other cause can be immediately identified.

Cause

A very infectious enterovirus, poliovirus (PV), which primarily affects young children

Mode of Transmission

Spreads through: direct person-to-person contact; contact with infected mucus, phlegm, or feces; or contact with contaminated food and water

Signs and Symptoms

- Fever
- Severe muscle pain
- Paralysis
- Difficulty of breathing
- Inability to move affected arm/leg
- Death may occur if respiratory muscles are affected.

Treatment

There is no treatment for polio but support treatment based on the symptoms presented/ manifested by the patient may be done.



Prevention and Control

- Get vaccinated with 3 doses of oral polio vaccine (OPV) or as inactivated poliovirus (IPV) found in some commercially available combination vaccines.
- Be careful with personal hygiene to help reduce the spread of polio.
- Improve public sanitation.

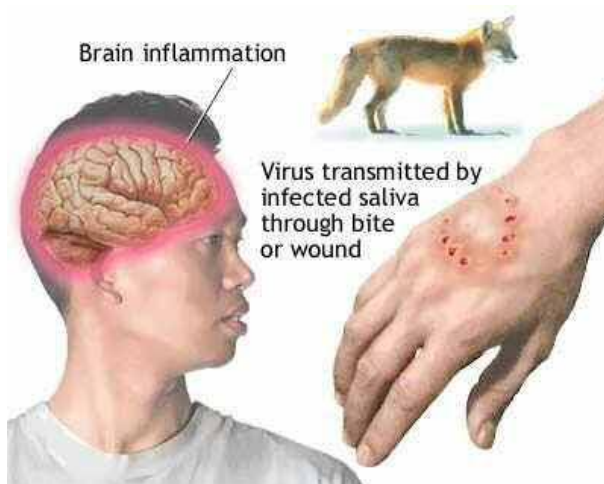
References

- Centers for Disease Control and Prevention. (2011). Poliomyelitis. Retrieved from <http://wwwnc.cdc.gov/travel/yellowbook/2012/chapter-3-infectious-diseases-related-to-travel/poliomyelitis.htm>
- DOH Philippines. (2005). Health Advisory on Poliomyelitis.
- World Health Organization. (2011). Poliomyelitis. Retrieved from <http://www.who.int/topics/poliomyelitis/en/>

Image from <http://freewheelchairmission.blogspot.com/2010/12/fwm-distribution-report-philippines.html>

Rabies

Rabies is a deadly viral infection that is mainly spread by infected animals.



Cause

Rabies virus

Mode of Transmission

Close contact with infected saliva (rabies virus) via bites or scratches from rabid animals, like dogs

Signs and Symptoms

- Headache and fever
- Pain or numbness of bite site
- Delirium and paralysis
- Muscle spasms
- Hydrophobia and aerophobia

Treatment (When Bitten by a Dog)

- Wash the wound immediately with soap and running water.
- Consult immediately even while observing the dog.

- Observe the dog for 14 days and consult your physician if any of the following occurs:
 - Dog becomes wild and runs aimlessly.
 - Dog drools (saliva).
 - Dog bites any moving or non-moving object.
 - Dog does not eat or drink.
 - Dog dies within observation period.
- If dog cannot be observed (stray dog), or if suspected to be rabid, consult your physician immediately or go to the nearest Animal Bite Treatment Center in your area.

Prevention and Control

Be a responsible pet owner.

- Have your pet dog immunized by a veterinarian against rabies at 3 months old and every year thereafter.
- Never allow your pet dog to roam the streets.
- Take care of your pet dog: bathe it; give it clean food; and provide clean sleeping quarters.

As an individual

- Get yourself pre-exposure anti-rabies vaccine, especially if you have a high-risk occupation.

References

- Centers for Disease Control and Prevention. (2011). Rabies. Retrieved from <http://wwwnc.cdc.gov/rabies.htm>
- DOH Philippines. (2005). Health Advisory on Rabies.
- World Health Organization. (2011). Rabies. Retrieved from <http://www.who.int/mediacentre/factsheets/fs099/en/>

Image from <http://www.rabies-symptoms.org/>



Severe Acute Respiratory Syndrome (SARS)



SARS is a life-threatening respiratory illness. Most cases of SARS have involved people who: a) cared for or lived with someone with SARS; b) had direct contact with infectious material (for example, respiratory secretions) from a person who had SARS; and c) touched the skin of other people or objects contaminated with infectious droplets and then touched their eyes, noses, or mouths.

Cause

A corona virus associated with common cold virus

Mode of Transmission

Spreads through close person-to-person contact (When an infected person coughs or sneezes, someone else breathes in the virus from the droplets released into the air.)

Signs and Symptoms

If one has visited a country or area, which is affected by SARS and/or had close contact

with a SARS patient, and within 14 days shows the following signs and symptoms:

- High fever (38°C)
- Headache
- Overall feeling of discomfort
- Body aches
- Dry cough
- Difficulty of breathing after 2 to 7 days

Treatment

There is no specific cure or treatment for SARS yet. SARS patients should be referred to the nearest DOH SARS Referral Hospital for clinical management.

Prevention

- Health screening should be imposed in airports and seaports on passengers from SARS-affected countries during outbreaks.
- Contacts of SARS patients and of new arrivals should be quarantined during outbreaks.

References

- DOH Philippines. (2005). Health Advisory on SARS.
- World Health Organization. (2011). Severe Respiratory Syndrome (SARS). Retrieved from <http://www.who.int/csr/sars/en/>

Image from <http://www.time.com/time/health/article/0,8599,1894072,00.html>

Schistosomiasis

This disease affects the liver, central nervous system, and other organs where eggs of *Schistosoma japonicum* get lodged, causing granuloma formation. Manifestation of the disease depends on the species a person is infected with. It is acquired mostly through personal habits and livelihood requiring contact with schisto-infested waters.

Cause

A blood fluke (parasite) called *Schistosoma japonicum* in the Philippines

Mode of Transmission

Transmitted through a tiny freshwater snail (*Oncomelania hupensis quadrasi*)

Signs and Symptoms

- Abdominal pain
- Low-grade fever
- Loose bowel movement
- Bloody stool
- Inflammation of the liver
- Bulging of the abdomen
- Enlargement of the spleen
- Complications in various organ systems caused by chronic schistosomiasis (for example, gastrointestinal system, heart, liver, brain)



Diagnostic Method

- Stool examination through Kato Katz method

- Serologic test: COPT (circumoval precipitin tests) and ELISA (enzyme-linked immunosorbent assay)

Treatment

- Prognosis: curable at the early stage but fatal in the advanced stage
- Drug of choice: Praziquantel tablets available for free at the Schistosomiasis Control Teams (SCTs) or health centers

Prevention and Control

- Submit stool for examination to the SCT or health center.
- Construct and use sanitary toilets.
- Avoid contact or exposing oneself to schisto-infested waters.
- Fence off or tie stray animals.
- Keep environment clean and participate in community efforts to control disease.
- Consult SCTs or health centers for additional information.

References

- Centers for Disease Control and Prevention. (2011). Parasites-Schistosomiasis. Retrieved from <http://www.cdc.gov/parasites/schistosomiasis/>
- DOH Philippines. (2005). Health Advisory on Schistosomiasis.
- World Health Organization. (2011). Schistosomiasis. Retrieved from <http://www.who.int/topics/schistosomiasis/en/>

Image from <http://www.ivmproject.net/about/index.cfm?fuseaction=static&label=schistosomiasis>

Sexually Transmitted Infections (STIs)

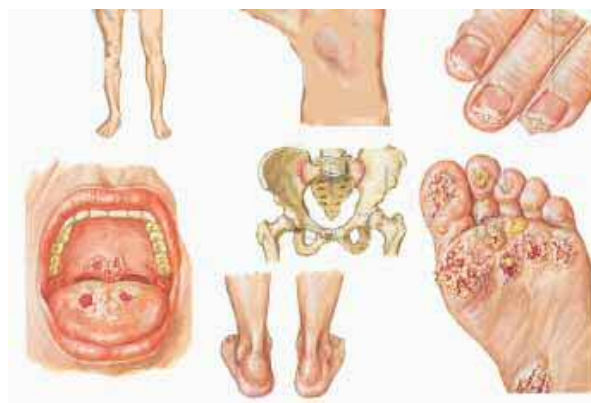
Sexually transmitted infections (STIs) are infections that are spread primarily from person-to-person during sex.

Cause

Bacteria, viruses, and parasites

Some of the most common infections are listed below:

- Gonorrhoea (caused by *Neisseria gonorrhoeae*)
- Chlamydial infections (caused by *Chlamydia trachomatis*)
- Syphilis (caused by *Treponema pallidum*)
- Chancroid (caused by *Haemophilus ducreyi*)
- Granuloma inguinale or donovanosis (caused by *Klebsiella granulomatis*, previously known as *Calymmatobacterium granulomatis*)
- AIDS (caused by Human Immunodeficiency Virus or HIV)
- Genital herpes (caused by Herpes simplex virus type 2)
- Genital warts and cervical cancer in women (caused by human papillomavirus)
- Hepatitis (caused by Hepatitis B virus); chronic cases may lead to cancer of the liver
- Inflammation in the brain, the eye, and the bowel (caused by cytomegalovirus)
- Vaginal trichomoniasis (caused by *Trichomonas vaginalis*)
- Vaginal yeast infection or vulvovaginitis



in women and inflammation of penis and foreskin or balanoposthitis in men (caused by *Candida albicans*)

Mode of Transmission

Spreads primarily through person-to-person sexual contact (There are more than 30 different sexually transmissible bacteria, viruses, and parasites. Several, in particular HIV and syphilis, can also be transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer.)

Signs and Symptoms

Symptoms vary and some STIs exist without symptoms.

- Soreness
- Unusual lumps or sores,
- Itching
- Pain when urinating
- Unusual discharge from the genitals



Treatment

- Vaginal yeast infection in women and balanoposthitis in men can be treated by creams, many of which are available without prescription.
- Chlamydia, gonorrhea, and syphilis are treated by antibiotics.
- Herpes and HIV can be treated by antiviral medications, while HPV, also known as genital warts, can be treated with lotions and liquid nitrogen to freeze the warts. There is currently no cure or vaccine.
- Hepatitis B is treated with certain oral medications or injections. It is difficult to treat, but there is an effective vaccine.
- Vaginal trichomoniasis is easily treated with antiparasitic and antibiotic medications.

Prevention

- Abstain from sexual intercourse (i.e., oral, vaginal, or anal sex).
- Have sexual intercourse only within a long-term, mutually monogamous relationship with an uninfected partner.
- Use male latex condoms consistently and correctly to reduce the transmission of HIV and other sexually transmitted infections, including gonorrhoea, chlamydial infection, and trichomoniasis.

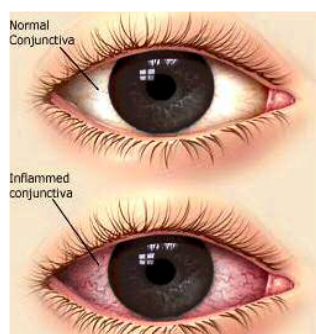
Reference

World Health Organization. 2012. Sexually transmitted infections.

Image from <http://awesomedc.com/2010/06/02/our-washington-dc-is-the-most-sexually-transmitted-disease-city-in-the-us-2/>



Sore Eyes



Also known as conjunctivitis, sore eyes is manifested in redness and inflammation of the membranes (conjunctiva) covering the whites of the eyes and the membranes in the

inner part of the eyelids. Incubation period or time from exposure to onset of symptoms is usually 5-12 days.

Causes

- Virus infection (Adenoviruses)
- Chemicals
- Trauma

Mode of Transmission

Direct contact with hands contaminated with eye secretions of an infected person; touching eyes with hands getting in contact with surfaces, instruments, eye solutions, or make-ups contaminated with the virus from an infected person; and entry of the virus through the eyes by swimming in poorly chlorinated pools

Signs and Symptoms

- Begins in one eye and may later affect both eyes
- Watery to pus-like discharge
- Redness of the eye with pain and/or itching sensation

- Eyelids that are stuck together upon waking up
- In severe cases, pain of the eyes upon exposure to sunlight and foreign-body solution

Treatment

- There is no specific treatment during the acute phase (1-2 weeks).
- If eye discharge is profuse and pus-like or patient develops blurring of vision or severe pain, consult with an ophthalmologist.

Prevention

- Wash hands frequently and thoroughly with soap and water.
- Minimize hand-to-eye contact.
- Use only own towels, eye drops, make-ups and applicators, sunglasses, or eye glasses.
- Wear eye/sunglasses on windy days to protect one's eyes from foreign particles.
- Avoid crowded places.
- Disinfect with dilute bleach solution surfaces, doorknobs, counters, elevator buttons, and handrails.
- Wash clothes, towels, pillow cases, and anything else which may have come in contact with an infected person.

References

- DOH Philippines. (2005). Health Advisory on Sore Eyes.
- EyeCareSource.com. (2011). Sore Eyes. Retrieved from <http://www.eyecaresource.com/problems/sore-eyes.html>

Image from <http://www.teachermamachronicles.com/2010/11/yikes-its-sore-eyes-epidemic.html>

Tuberculosis

Tuberculosis is an infectious disease that primarily affects the lungs and this condition is known as pulmonary tuberculosis. Other parts of the body may also be affected by tuberculosis; this is known as extra-pulmonary tuberculosis. It may affect the bones, meninges, joints, genito-urinary tract, intestines, liver, kidneys, and the heart.

Cause

Mycobacterium tuberculosis or tubercle bacilli

Mode of Transmission

Inhalation of bacteria released from air droplets when a person with TB coughs or sneezes (Generally, the bacteria will be killed in 5 minutes after direct exposure to sunlight but these bacteria can survive for up to 1 year in a dark, moist, and poorly ventilated area.)

Signs and Symptoms

- Cough for two weeks or more
- Fever
- Chest or back pain not referable to other diseases
- Loss of weight
- Blood-streaked sputum or hemoptysis

Treatment

- Latent TB (TB infection): INH for children 5 years old and below only
- Active TB: INH in combination with one or more of several drugs, including rifampin (Rifadin), ethambutol (Myambutol),

pyrazinamide, and streptomycin for 6-8 months

Prevention

Health Professional:

- Find the TB patient early and provide treatment through DOT (directly observed treatment) to cure the patient.



Individual:

- Adopt a healthy lifestyle to boost the immune system.
 - Engage in physical activity or exercise regularly.
 - Get enough rest.
 - Eat a balanced diet.
 - Keep the living area well ventilated.
 - Maintain personal hygiene.
 - Cover the nose and mouth when coughing and sneezing.

References

- Centers for Disease Control and Prevention. (2011). Tuberculosis (TB). Retrieved from [http:// www.cdc.gov/TB/](http://www.cdc.gov/TB/)
- DOH. (2008). The Health Promotion Handbook: A Guide to Doing Advocacy, Communication, and Social Mobilization for the TB Control Program in the Community.
- DOH Philippines. (2005). Health Advisory on Tuberculosis.
- World Health Organization. (2011). Tuberculosis. Retrieved from <http://www.who.int/mediacentre/factsheets/fs104/en/>

Image from <http://www.who.int/tb/publications/2009/airborne/photos/gallery/en/index2.html>

Typhoid Fever

Typhoid fever is an infectious disease which is also known as enteric fever or just typhoid.

Cause

Salmonella typhi bacteria

Mode of Transmission

Spreads through contaminated food and water or through close contact with someone who is infected

Signs and Symptoms

- Sustained high fever
- Headache
- Malaise (weakness)
- Anorexia (loss of appetite)
- Either diarrhea or constipation
- Abdominal discomfort

Treatment

Antibiotics, such as ciprofloxacin, may be given to adults. Ceftriaxone (injectable antibiotic) may be given to pregnant women and children.

Prevention and Control

- Avoid drinking untreated water. Boil water for drinking (upon reaching boiling point, extend boiling for 2 or more minutes) or do water chlorination.
- Cook food well and always cover food to prevent contamination from flies and other insects.
- Avoid eating unsanitary street-vended foods.



- Wash hands with soap and water after using the toilet and before eating.
- Keep surroundings clean to prevent breeding of flies.
- Get immunized with WHO pre-qualified oral injectable vaccines.

References

- Balentine, Jerry R. (2011) Typhoid Fever. Retrieved from http://www.medicinenet.com/typhoid_fever/article.htm
- Centers for Disease Control and Prevention. (2011). Typhoid Fever. Retrieved from http://www.cdc.gov/nczved/.../typhoid_fever/
- DOH Philippines. (2005). Health Advisory on Typhoid Fever.

Image from http://www.allvoices.com/people/Vital_signs

SECTION B
PHILIPPINE HEALTH ADVISORIES

Non-Communicable Diseases

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Alzheimer's Disease

Alzheimer's Disease is a form of dementia characterized by the progressive degenerative brain syndrome that affects memory, thinking, behavior, and emotion.

Causes

- Destruction of brain cells disrupting the transmitters that carry messages in the brain, particularly those responsible for storing memories

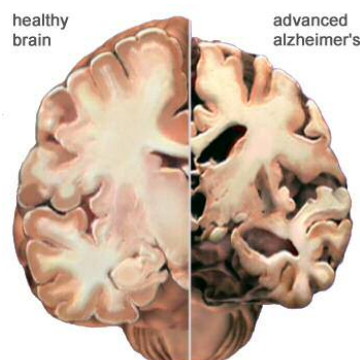
Cause of brain cell destruction remains unknown.

Studies show that genetic factors play a part in the development of the disorder.

- The neurotransmitters acetylcholine and norepinephrine hypothesized to be hypoactive in Alzheimer's Disease

Signs and Symptoms

- Loss of memory characterized by inability to recall past as well as new persons, events, situations, and information
- Difficulty in finding the right words
- Difficulty in understanding what people are saying



- Difficulty in performing previously routine tasks
- Personality and mood changes

Treatment

- Currently there is no cure for Alzheimer's Disease.
- General treatment approach to patient is to provide supportive medical care, pharmacological treatment for specific symptoms, including disruptive behavior, and emotional support for patients and their families.

Prevention

The risk of Alzheimer's Disease and other dementias may be reduced by eating right, exercising, staying mentally and socially active, and keeping stress in check. By leading a brain-healthy lifestyle, you may even be able to prevent the symptoms of Alzheimer's Disease entirely and slow down, or even reverse, the deterioration of aging.

Reference

- DOH Philippines. (2005). Health Advisory on Alzheimer's Disease.
- Helpguide.org. (2011) Alzheimer's and Dementia Prevention. Retrieved from http://www.helpguide.org/elder/alzheimers_prevention_slowing_down_treatment.htm

Image from <http://www.ppa.org.ph/alzheimers-disease.html>

Cancer

Cancer is a group of many related diseases that begins in cells. Normally, cells grow and divide to produce more cells only when the body needs them. This orderly process helps keep the body healthy. Sometimes, however, cells keep dividing even if new cells are not needed. These extra cells form a mass of tissue, usually called a lump, swelling, or tumor.

Tumors can be classified as: benign tumors, which are not cancerous, can often be removed, and in most cases, do not come back; and malignant tumors which are cancerous. Cells in the latter tumors are abnormal; these can divide without control, and invade and damage nearby tissues and organs.

Cause

A result of a complex mix of factors related to heredity, diet, physical inactivity, and prolonged, continuous exposure to certain chemicals and other substances

A number of factors that increase a person's chance of developing cancer has been identified and are called "risk factors":

- **Cigarette Smoking.** Smoking causes lung cancer. Smokers are more likely to develop lung cancer compared with non-smokers. Smoking has also been linked to cancers of the mouth, larynx, pharynx, esophagus, pancreas, and bladder.



Cancer Awareness Ribbons

- **Excessive Alcohol Intake.** Heavy drinkers have an increased risk of cancers of the mouth, throat, esophagus, larynx, and liver. Some studies suggest that even moderate drinking may slightly increase the risk of breast cancer.
- **Unhealthy Diet.** Diet plays an important role in the development of many cancers, particularly in the digestive and reproductive organs. Long-term habit of not eating a healthy diet has been linked with increased incidence of cancer. Likewise, being seriously overweight has been linked to breast cancer.
- **Chemicals and Other Substances.** Exposure to substances, such as chemicals, metals, or pesticides can increase the risk of cancer. Asbestos,



nickel, cadmium, uranium, radon, vinyl chloride, and benzene are well-known cancer-causing agents (carcinogens). These may act alone or together with other carcinogens, like cigarette smoke, to increase the risk of cancer.

- *Secondhand Smoke.* Secondhand smoke is the smoke emitted from the burning end of heated tobacco products usually in combination with the smoke exhaled by the smoker.

Signs and Symptoms

General signs of cancer (Signs and symptoms are specific for each type of cancer.):

- Fatigue
- Unexplained weight loss
- Fever
- Weakness
- Pain
- Skin changes (itching, excessive hair growth, redness, jaundice, and hyperpigmentation)

Treatment

Treatment is specific for each type of cancer.

Prevention

There is no 100% guarantee that cancer can ever be prevented. However, being aware of the cancer risk factors will help reduce the possibility of cancer.

To lessen the risk of developing cancer:

- Quit smoking.
- Limit drinking alcoholic beverages.
- Watch your diet.
- Consult your doctor regularly.
- Do regular physical activity.
- Have yourself immunized (Hepatitis B vaccine at birth up to 6 months old for prevention of liver cancer, and human papillomavirus vaccine for the prevention of cervical cancer among women).

Early detection and proper treatment play a big role in controlling cancer.

References

- Davis, Charles Patrick MD. (2011). Cancer. Retrieved from <http://www.medicinenet.com/cancer/article.htm>
- DOH Philippines. (2005). Health Advisory on Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://www.politicsandculture.net/taking-on-cancer-with-power-of-the-human-spirit/>

Cancer

Bone Cancer

Bone cancer is a rare disease that affects both children and adults (the incidence increases at age 60). There are different types of bone cancer based on the type of cell where the cancer began. The most common types of bone cancer include:

- Osteosarcoma (begins in the bone cells and occurs most often in children and young adults)
- Chondrosarcoma (begins in cartilage cells that are commonly found on the ends of bones; commonly affects older adults)
- Ewing's sarcoma (not clear where in the bone Ewing's sarcoma begins, although some scientists believe that it may begin in the nerve tissue within the bone; occurs most often in children and young adults)

A number of factors may put a person at increased risk:

- Exposure to radiation or chemotherapy treatments for other conditions;
- Paget's disease, a noncancerous condition characterized by abnormal development of new bone cells;
- Rare hereditary disease passed through families, such as retinoblastoma (an uncommon cancer of the eye).

Cause

Not clear what causes most bone cancers

Risk Factors

- Areas of rapid bone growth, such as long bones in children and adolescents
- Prolonged growth or overstimulated metabolism, such as chronic osteomyelitis and hyperparathyroidism
- External radiation and bone-seeking isotopes
- Metastatic spread from another tumor (among older adults)

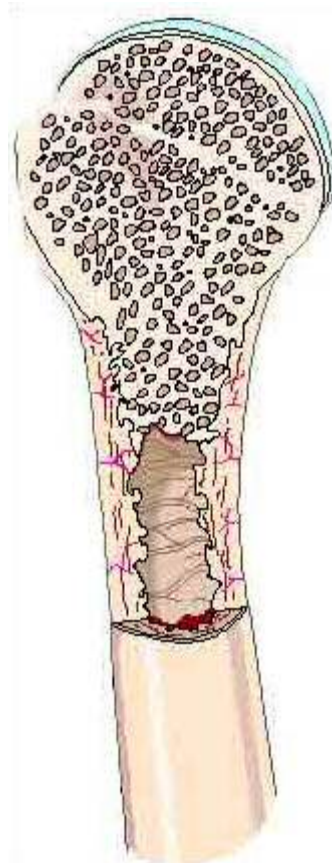
Signs and Symptoms

- Extreme bone pain, especially at night
- Swelling and tenderness near the affected area
- Fracture/broken bone
- Fatigue
- Unintended weight loss

Treatment

Management of bone cancer is usually done by:

- Amputation (standard treatment of most bone cancers)
- Limb-sparing surgery for both malignant and aggressive benign tumors





- Orthopedic treatment
- Bioengineering
- Radiographic imaging
- Radiotherapy
- Chemotherapy
- Adjuvant chemotherapy (parallel treatment)

Prevention

- Prevention of bone cancer will require a better understanding of its causes than is currently available.
- Patients with persistent and progressive bone pain should have an x-ray study of the bone.
- Early detection is extremely difficult in asymptomatic patients.
- Careful screening may help detect and treat the cancer in its early stages, thereby improving the chances for survival.

Reference

- DOH Philippines. (2005). Health Advisory on Bone Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://www.irishhealth.com/article.html?id=1264>

Cancer

Breast Cancer

Breast cancer is a cancer that starts from cells of the breast. It is the most common cancer diagnosed in Filipino women. There are numerous types of breast cancer, but cancer that begins in the milk ducts (ductal carcinoma) is the most common type. Men can also develop breast cancer.

Cause

Not clear what causes breast cancer

Risk Factors

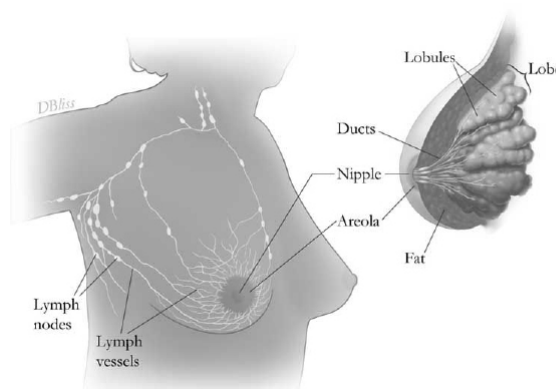
- Genetic factor or the hereditary susceptibility (family history)
- Unhealthy diet that is high in fat, salt, and sugar
- Obesity/overweight
- Woman's age (above 30 years old) during first pregnancy or those who never had any children
- Smoking and drinking

Signs and Symptoms

- Lump, thickening or swelling of the breast
- Unusual change in the size or shape of the breast
- One breast unusually lower than the other
- Puckering/dimpling of the skin of the breast
- Retraction of the nipple
- A sore in the nipple

Treatment

Breast cancers, when detected early and given prompt treatment, have excellent chances of



being cured. Mammography and Breast Self-Examination (BSE) are important in the early detection of breast cancer.

- Local therapy: surgery and radiation
- Systemic therapy: hormone therapy, chemotherapy, and targeted therapy

Prevention

Generally, breast cancer cannot be prevented, particularly if a woman has a family history of breast cancer. To minimize contributing risk factors:

- Eat a healthy diet consisting of high-fiber foods (cruciferous vegetables, foods rich in vitamins A and C);
- Get enough exercise (Be active to maintain body muscle's flexibility.);
- Maintain ideal body weight;
- Undergo mammography and BSE.

Reference

- DOH Philippines. (2005). Health Advisory on Breast Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://www.uchospitals.edu/online-library/content=CDR62955>

Breast Self-Examination



Breast Self-Examination (BSE) is important in detecting breast cancer early. It is done once a month, a week after a woman's monthly period. Through BSE, a woman becomes familiar with the usual appearance and feel of her breasts. This way, she can easily tell any change and consult a doctor immediately.

Before A Mirror

1. Stand before a mirror with your arms at your side. Inspect your breast for any changes in the size, shape, and contour. Check for swelling, dimpling, or puckering of the skin. Gently squeeze each nipple and check for any discharge.
2. Put your hands on your hips and press down firmly, elbows out. Repeat the inspection.
3. Raise your arms over your head and repeat the inspection. Normally, your left breast and right breast will not be exactly the same. It is not very often that a woman's breasts are totally the same. Through regular inspection, you will know what is normal for you.



breast. Check for any lump, hard knot, or thickening.



Lying Down

1. Lie flat on your back. Place a pillow or folded towel under your left shoulder. Put your left arm under your head.
2. Press gently but firmly your flattened fingers to breast and move in circular motions.
3. Check for any lump, hard knot, or thickening.



Breast Clock Examination

This is a methodical way of checking your breast for any lump, hard knot, or thickening.

1. Imagine your breast as a clock. Start at the outermost part of your breast or the 12 o'clock position. Then move on to the 1 o'clock position and so on around the imaginary clock face until you are back to the 12 o'clock position.
2. Examine every part of your breast. You will need to make at least 3 circles to complete the examination on one breast.
3. Move hand over breast in a downward and upward motion. Check for any irregularity.
4. Squeeze the nipple of each breast between thumb and fore/finger. Report any discharge to a doctor right away.



In The Shower

1. Your hands will move easier over wet skin. It is therefore easier for you to examine your breast during a bath or shower.
2. Use your right hand to examine your left breast, and your left hand for your right breast.
3. Keep your fingers flat. Move them gently in circular motions over every part of each

Reference

DOH Philippines. (2005). Health Advisory on Breast Self-Examination

Cancer

Cancer in Children

There are cancers common among children.

Leukemia

Leukemia is the most common cancer among children.

There are two types of leukemias:

1. Acute leukemia (uncontrolled proliferation of immature or “blastic” cells); and
2. Chronic leukemia (proliferation of the more mature or differentiated cells).

Leukemias may vary in presentation.

Some are detected through routine physical examinations. Some, however, are present with pallor, easy bruisability, malaise, anorexia, intermittent fever, bone pains, abdominal pain or bleeding.

Brain and Spinal Cancer

This is the second most common cancer among children. In the early stages of brain tumors, there may be headaches, dizziness, (often with nausea or vomiting), blurring of vision, double vision, difficulty in walking or handling of objects.

Lymphomas (Hodgkin’s Disease or Non-Hodgkin Lymphoma)

These usually involve the lymph nodes but may at times arise from other organs rich in lymphoid tissue. They cause swelling of



lymph nodes in the neck, chest, axilla, and groin. They may also present as generalized weakness and fever.

Retinoblastoma

This is an eye cancer which usually occurs in children below 4 years old. The more common presenting signs include the cat’s eye reflex (a whitish appearance of the pupil) or squint. A red and painful eye, limitation of vision, or proptosis (eye dislocation) are noted in the late stages.

Wilm’s Tumor

This is a cancer of the kidney occurring in very young children. Usual sign is an abdominal or flank mass.



Osteogenic Sarcoma

This is a type of bone cancer, which usually presents with pain, with or without swelling, or a mass overlying the involved bone.

Rhabdomyosarcoma

This is the most common soft tissue cancer in children, often presenting as a mass, which may be painful. It usually occurs in the following sites: head and neck; genito-urinary tract; trunk; and extremities.

Gonadal and Germ Cell Sites

These usually present as a testicular mass or a pelvic mass among girls.

Signs and Symptoms

- Prolonged/unexplained fever or illness
- Unexplained pallor
- Increased tendency to bruise
- Unexplained localized pain or limping
- Unusual masses or swelling
- Frequent headaches, often with vomiting
- Sudden eye or visual changes
- Sudden or progressive weight loss

Treatment

Management of childhood cancers is usually by a combination of the different modalities of treatment (surgery, radiotherapy, chemotherapy), coordinated by a team of experts including pediatric oncologists, surgeons, nurses, social workers, psychologists, and others who assist children and their families.

Prevention/Early Detection

Malignancies in children are difficult to detect because they may present similarly as other common childhood diseases. Parents should have their children undergo regular medical check-up and be alerted to the symptoms.

References

- DOH Philippines. (2005). Health Advisory on Cancer in Children.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://www.acrf.com.au/2010/childhood-cancer-on-notice/>

Cancer

Cervical Cancer

Cervical cancer is the second leading cancer among women in the Philippines.

The cervix is part of the female reproductive system located at the junction of the vagina and the uterus (womb). It is often called the neck of the womb.

Generally, all women who have had sexual intercourse are at risk of cervical cancer. Also susceptible are: those who have multiple sexual partners; those whose sexual partners have several sexual partners; and those who have had sexual intercourse at a very early age (15 or 16 years old).

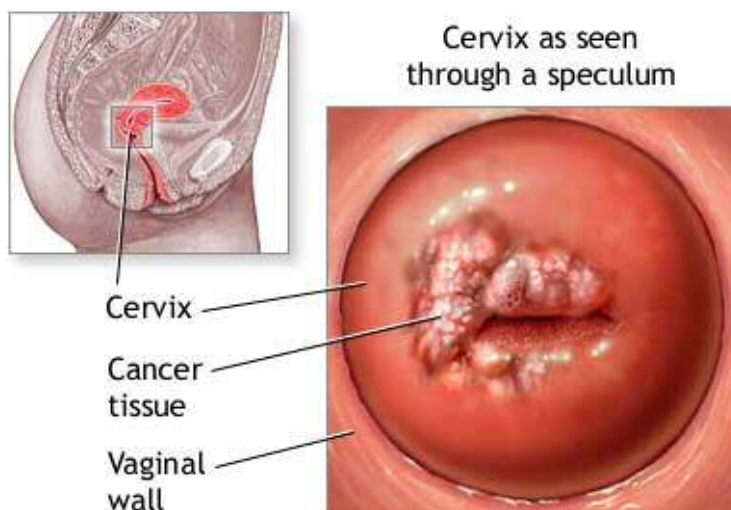
However, rare types of cervical cancer can occur even in women who have never engaged in sexual intercourse.

Cause

An infectious agent, particularly human papillomavirus (HPV), transmitted through sexual intercourse

Risk Factors

- Parity of 7 or more
- Long-term use of oral contraceptives (OCPs)
- Smoking
- HIV infection among women
- Early age at first intercourse
- Increased number of sex partners (6 or more)



- Early age at first full-term pregnancy (age <17)
- Low socio-economic status

Signs and Symptoms

Impressions that often lead to cervical cancer:

- Unusual bleeding from the vagina at any time
- Unpleasant vaginal discharge

Generally, cervical cancer does not have symptoms. Often, the disease is detected during its advance stage.

Prevention/Early Detection

- Cervical cancer, when detected early, is curable.
- Pap smear is the most reliable and practical way to diagnose early cervical cancer.



- Pap smear should be done 3 years after the first vaginal intercourse but not earlier than age 21. After that, it should be done every year for 3 years.
- If the Pap smear test is negative for the consecutive 3 years, then it can be done every 2 or 3 years. In unmarried women who have never engaged in sexual activity, Pap smear should be done at age 35.
- Visual inspection with Acetic Acid Wash (VIA) is an acceptable alternative to Pap smear in low-resource setting.

The following preventive measures should be followed:

- A one-partner sexual relationship should be observed;
- A delay on the first sexual intercourse;
- Consistent and correct use of barrier contraceptives, like condoms during sexual intercourse; and
- Vaccination of anti-cervical cancer vaccine (HPV vaccine).

Treatment

Concurrent chemotherapy and complete radiotherapy (chemoradiation)

References

- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>
- Society of Gynecologic Oncologists of the Philippines Foundation, Inc. (2010). Clinical Guidelines for the Obstetrician Gynecologist.

Image from <http://www.whatiscancer.com/cervical-cancer.html>



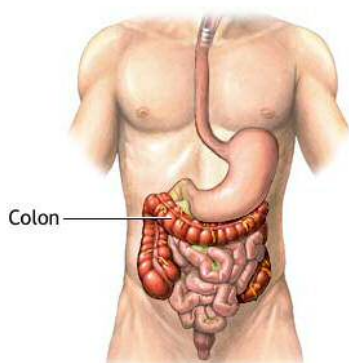
Cancer

Colon Cancer

Colon cancer is a cancer of the large intestine (colon), the lower part of the digestive system.

Most cases of colon cancer begin as small, noncancerous (benign) clumps of cells called adenomatous polyps.

Over time, some of these polyps become colon cancers.



Cause

May be linked to a diet high in fat and deficient in whole grains, fruits, and vegetables

Risk Factors

- Increases markedly after age 50
- Having a family history of colon cancer
- Having a personal or family history of polyps in the colon
- Inflammatory bowel disease

Signs and Symptoms

A change in bowel habits, such as:

- Recurrent diarrhea and constipation
- Abdominal discomfort
- Weight loss
- Unexplained anemia
- Blood in the stool

Early colon cancer is asymptomatic (no detectable symptoms), and there is still no efficient screening method for early detection.

Treatment

Early colon cancer is curable, and surgery is the most effective method of treatment.

Prevention/Early Detection

- The most effective prevention of colon cancer is early detection and removal of precancerous colon polyps before they turn cancerous.
- Barium enema or colonoscopy can be used for earlier diagnosis of symptomatic patients (particularly those aged 50 years old and above).

Reference

- DOH Philippines. (2005). Health Advisory on Colon Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://www.umm.edu/presentations/100158.htm>

Cancer

Leukemia

Leukemia is cancer of the body's blood-forming tissues, including the bone marrow and the lymphatic system.

Different types of leukemia are classified based on speed of progression and type of cells involved:

- Acute leukemia (The abnormal blood cells are immature blood cells or blasts.)
- Chronic leukemia (This involves more mature blood cells that replicate or accumulate more slowly and can function normally for a period of time. Some forms of chronic leukemia initially produce no symptoms and can go unnoticed or undiagnosed for years.)

The second type of classification is by type of white blood cell affected:

- Lymphocytic leukemia (This affects the lymphoid cells or lymphocytes, which form lymphoid or lymphatic tissue, making up the immune system.)
- Myelogenous leukemia (This affects the myeloid cells that give rise to red blood cells, white blood cells, and platelet-producing cells.)



Cause

No exact cause (It may be a combination of genetic and environmental factors. Exposure to high doses of radiation and continuous and prolonged exposure to certain chemicals have been blamed for increasing the risk of getting leukemia.)

Signs and Symptoms

- Fatigue, weakness
- Bone pain or tenderness
- Weight loss
- Easy bruising
- Tiny red spots in your skin (petechiae)
- Frequent nosebleed
- Recurring infections, especially among children
- Swollen lymph nodes, enlarged liver or spleen
- Excessive sweating, especially at night



Symptoms of acute leukemia appear suddenly. Chronic leukemia may progress slowly with few symptoms.



Treatment

- Treatment for leukemia can be complex depending on the type of leukemia and other factors.
- Some forms of leukemia, particularly Acute Lymphocytic Leukemia in children, are highly curable by chemotherapy.

References

- DOH Philippines. (2005). Health Advisory on Leukemia.
- Hu, Wendy, et al. (2011). Leukemia. Retrieved from http://www.emedicinehealth.com/leukemia/article_em.htm
- Wedro, Benjamin C. (2011). Leukemia. Retrieved from <http://www.medicinenet.com/leukemia/article.htm>

Images from:

- <http://newsinfo.inquirer.net/296176/help-aizelle-leukemia-sufferer>
- http://dailybruin.com/images/46785_web.news.2.8.liang.picao.jpg

Cancer

Liver Cancer

Liver cancer begins in the cells of the liver. The incidence in males is practically $2^{1/2}$ times more than in females. Incidence increases at age 40. Hepatitis B virus (HBV) is associated with liver cancer. Primary liver cancer is much more common in countries where HBV is prevalent, such as the Philippines and other Southeast Asian countries.

Causes

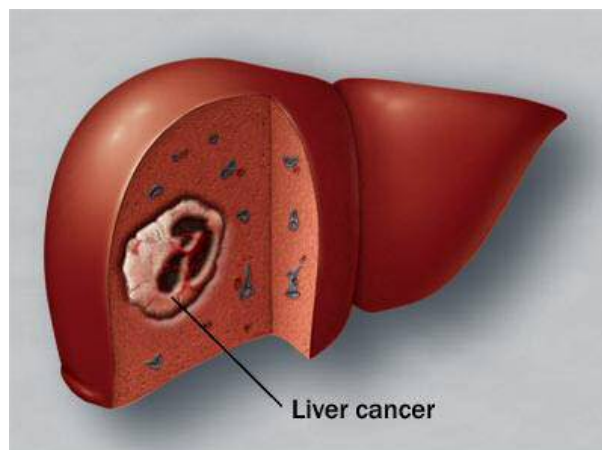
- (Complication of) Hepatitis B and Hepatitis C
- Heavy alcohol consumption
- Prolonged heavy intake of aflatoxin and other chemical carcinogens

Signs and Symptoms

- Abdominal pain
- Weight loss
- Weakness
- Loss of appetite
- Abdominal mass or an enlarged liver

Treatment

For the occasional patient seen in an early stage, surgery can be curative. For the majority of cases, who are usually seen in an incurable stage, judicious and cost-effective palliative care can provide an acceptable quality of life.



Prevention

Lowering the prevalence of Hepatitis B through infant vaccination and improving sanitation nationwide is a positive step.

Unfortunately, there is no efficient early detection method yet for liver cancer.

Reference

- DOH Philippines. (2005). Health Advisory on Liver Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://www.mayoclinic.com/health/medical/IM04073>

Cancer

Lung Cancer

Lung cancer is the *top* leading cancer among men and 3rd among women in the Philippines. The steady increase in rates of people developing lung cancer and dying from it is the delayed effect of increasing incidence of smoking among Filipinos.

Causes

- Smoking (Almost 100% of all lung cancer cases are caused by smoking.)
- Involuntary smoking, also called “secondhand smoking” (non-smokers breathing harmful substances contained in tobacco smoke)
- Pollution (air pollutants, such as combustion of diesel and other fuels)

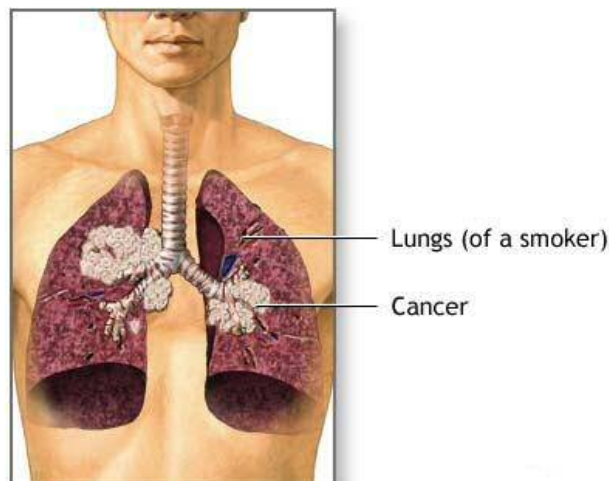
Signs and Symptoms

- Persistent dry cough that gets worse over time
- Constant chest pain
- Blood-stained sputum (phlegm)
- Extreme shortness of breath, wheezing, or hoarseness
- Repeated pneumonia or bronchitis
- Swelling of the neck and face
- Weight loss
- Fatigue
- Difficulty in swallowing

Treatment

Management of lung cancer is usually done by:

- Surgery
- Chemotherapy



- Radiation therapy
- Targeted drug therapy

Prevention

- Unfortunately, there is no effective way of detecting lung cancer in its early stages.
- The best approach to lung cancer prevention is to stop smoking.
- Also, the following may help prevent lung cancer:
 - Avoid secondhand smoke.
 - Eat a healthy diet.
 - Exercise.

Reference

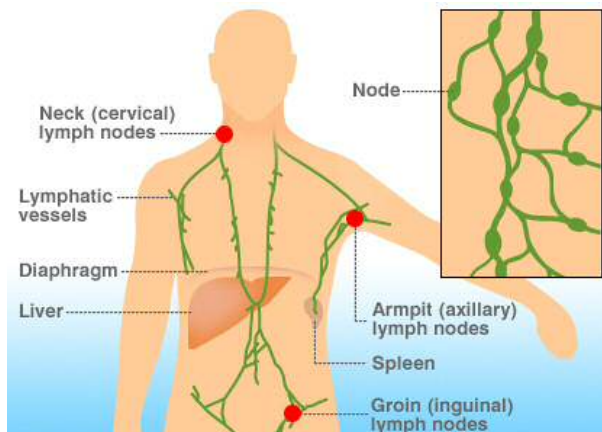
- DOH Philippines. (2005). Health Advisory on Lung Cancer.
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- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph>

Image from <http://www.flixya.com/photo/758629/Lung-Cancer-Dangerous-BUT-You-Can-Prevent-It>

Cancer

Lymphomas

Hodgkin's Lymphoma and Non-Hodgkin's Lymphoma



Hodgkin's lymphoma is a cancer of the lymphatic system, which is part of the immune system and which helps fight infections and other diseases. In addition, the lymphatic system filters out bacteria, viruses, and other unwanted substances. In Hodgkin's lymphoma, the cells grow abnormally and may spread beyond the lymphatic system.

Non-Hodgkin's lymphoma is cancer that originates in the lymphatic system, where tumors develop from lymphocytes—a type of white blood cell. Non-Hodgkin's lymphoma is more common than the other general type of lymphoma—Hodgkin's disease.

Cause

Unknown. However, a viral factor is considered since certain lymphomas have been shown by epidemiologic, electron microscopy, cell culture and immunologic studies to have features implicating viral etiologies.

Signs and Symptoms

Hodgkin's lymphoma

- Painless swelling of lymph nodes in the neck, armpits, or groin
- Persistent fatigue
- Fever and chills
- Night sweats
- Unexplained weight loss—as much as 10 per cent or more of your body weight
- Coughing, trouble breathing, or chest pain
- Loss of appetite
- Itching
- Increased sensitivity to the effects of alcohol or pain in lymph nodes after drinking alcohol

Non-Hodgkin's lymphoma

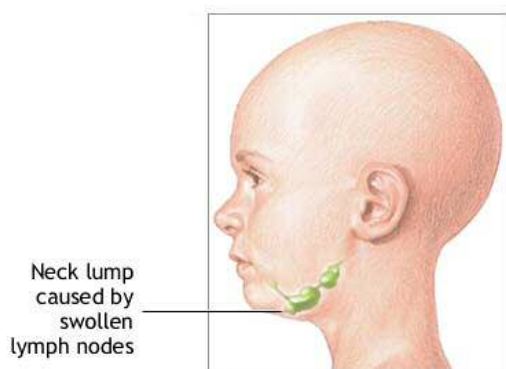
- Swollen lymph nodes in the neck, armpit, or groin
- Abdominal pain or swelling
- Chest pain, coughing, or trouble breathing
- Fatigue
- Fever
- Night sweats
- Weight loss

Other organs, like the oropharynx, skin, gastrointestinal tract, and bone, may be involved.



Treatment

- A multidisciplinary approach offers the most cure rates.
- Chemotherapy is the primary treatment, with adjunct radiotherapy in some instances.
- Bone marrow transplant
- Stem cell transplant



Prevention and Control

There is no known way to prevent lymphoma. A standard recommendation is to avoid the known risk factors for the disease. However, some risk factors for lymphoma are unknown, and therefore impossible to avoid.

References

- Balentine, Jerry. MD (2011). Lymphoma (Hodgkin's Disease and Non-Hodgkin's Lymphoma). Retrieved from http://www.emedicinehealth.com/lymphoma/article_em.htm
- Lymphoma.com (2011). Lymphoma. Retrieved from <http://www.lymphoma.com/>

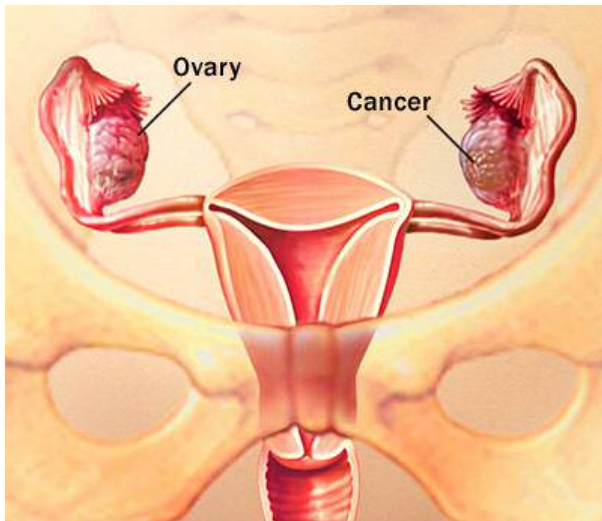
Images from:

- <http://health.nytimes.com/health/guides/disease/non-hodgkins-lymphoma/print.html>
- <http://healtyonline.info/other-types-of-nhls-non-hodgkins-lymphomas.html>

Cancer

Ovarian Cancer

Ovarian cancer is a disease produced by the rapid growth and division of cells within one or both ovaries. Women have two ovaries, one on each side of the uterus, which produce eggs (ova), as well as the hormones estrogen, progesterone, and testosterone.



Cause

Not clear what causes ovarian cancer

Risk Factors

- Family history of cancer
- Personal history of cancer (breast, colon, or rectal cancer)
- Age (Most cases occur after menopause, around the age of 51.)
- Menstrual difficulties

Ovarian cancer often goes undetected until it has spread within the pelvis and abdomen.

Signs and Symptoms

- Abdominal mass
- Mass felt during pelvic examination

Ovarian cancers are usually asymptomatic at the outset and many cases are detected late.

Treatment

For early cancer of the ovary, surgery is curative. In some cases of advanced cancer, surgery followed by chemotherapy may increase survival. Advanced cancer requires judicious and cost effective palliative care.

Prevention/Early Detection

There is no sure way to prevent ovarian cancer. The following may be able to reduce the risk of ovarian cancer:

- Taking birth control pills
- Thorough annual pelvic examinations for early detection of ovarian cancer (This is recommended to start at age 40.)

Reference

- DOH Philippines. (2005). Health Advisory on Ovarian Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://whatisthetrend.net/ovarian-cancer-treatment-a-new-drug-from-nektar-therapeutics-20101537.html>



Cancer

Prostate Cancer

Prostate cancer is the 4th leading cancer in men. It occurs in the prostate gland, a small gland that produces the semen or fluid that nourishes and transports sperm.

There are three main stages of prostate cancer: 1) localized (cancer just in the prostate gland); 2) locally advanced prostate cancer (has spread beyond the prostate capsule but is still connected to the prostate gland); and 3) advanced or metastatic prostate cancer (has spread outside the prostate gland with no remaining link to the original cancer in the prostate gland).

Cause

Not clear what causes prostate cancer

Risk Factors

- Age (Older men—50 years old and above—are prone to prostate cancer.)
- Family history (if father or brother developed prostate cancer at or under the age of 60 or more than one man on the same side of the family has had prostate cancer)
- Diet high in fat (including dairy products) and low in fresh fruit and vegetables
- High intake of calcium (such as from dairy foods)

Signs and Symptoms (Usually in More Advanced Prostate Cancer)

- Trouble urinating
- Decreased force in the stream of urine
- Blood in the urine

- Blood in the semen
- Swelling in the legs
- Discomfort in the pelvic area
- Bone pain

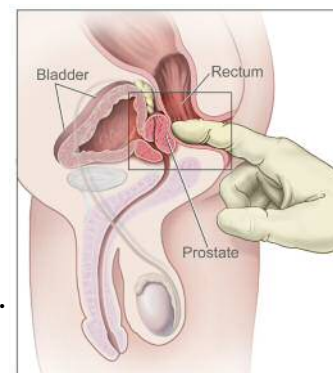
Treatment

Management of prostate cancer is usually done by:

- Radiation therapy using high-energy x-rays to destroy the cancer cells, while doing as little harm as possible to normal cells
- Hormone therapy (tablets or injections) to delay or stop the growth of cancer cells
- Chemotherapy
- Removal of the prostate gland (radical prostatectomy)

Prevention

- Eat a balanced diet.
- Quit smoking.
- Exercise regularly.
- Avoid too much alcohol intake.
- Get regular medical check-up.



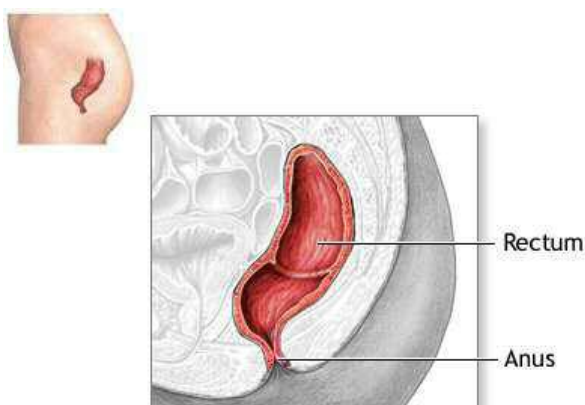
References

- Macmillan Cancer Support. 2012. Prostate Cancer. Retrieved from <http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Prostate/Prostatecancer.aspx>
- MayoClinic. 2012. Prostate Cancer. Retrieved from <http://www.mayoclinic.com/health/prostate-cancer/DS00043>
- National Institute for Health and Clinical Excellence (NICE). 2008. Prostate Cancer
- Philippine Online Chronicles. 2010. Prostate Cancer Awareness. Retrieved from <http://www.thepoc.net/thepoc-features/health-and-wellness/health-and-fitness-features/8153-prostate-cancer-awareness-month-mens-health.html>

Image from http://www.medicinenet.com/prostate_cancer_screening/page2.htm

Cancer

Rectal Cancer



Rectal cancer is cancer of the last several inches of the colon. Rectal cancer increases markedly at age 50.

Causes

- Usually develop from polyps (like those in colon)
- Diet high in fat and deficient in fiber (Evidence is not yet as strong as that for colon cancer.)

Risk Factors

- Personal or family history (hereditary) of rectal cancer
- Polyps in the rectum

Signs and Symptoms

- Change in bowel habits
- Transanal bleeding
- Unexplained weight loss
- Anemia
- Blood in the stool

Treatment

Early rectal cancer is curable by surgery. For advanced cases, judicious and cost-effective palliative care can offer an acceptable quality of life.

Prevention/Early Detection

- There is insufficient evidence that a specific screening method had reduced mortality.
- Rectal examination and proctoscopy are prescribed for earlier diagnosis of symptomatic patients, especially for males and females 50 years and above.
- Polyp removal is recommended.

Reference

- DOH Philippines. (2005). Health Advisory on Rectum Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://www.umm.edu/imagepages/9390.htm>

Cancer

Stomach Cancer

Stomach cancer is also called gastric cancer. It occurs twice as often in men than in women and it is more common among people aged 55 and above.

Causes

- Pernicious anemia, atrophic gastritis (Evidence suggests that gastric cancer may be linked to diet, such as salty food, smoked fish, and pickled vegetables.)

Risk Factors

- A diet high in salt and nitrates and low in vitamins A and C
- Exposure to wood chemicals or preservatives

Signs and Symptoms

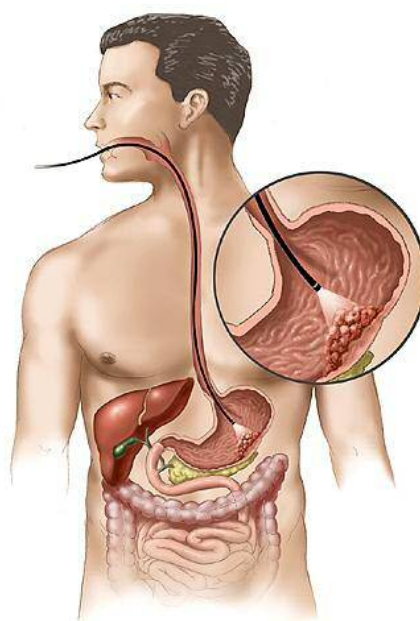
Early symptoms:

- Indigestion
- Dyspepsia
- Loss of appetite
- Anemia

Advanced stage:

- Weight loss
- Difficulty in swallowing
- Vomiting
- Abdominal mass

Gastric cancer progresses silently to an advanced stage before symptoms alert the physician or the patient.



Treatment

Surgery remains the most effective method of treating gastric cancer.

Prevention

- Unfortunately, there is neither an effective method of primary prevention nor an early detection of stomach cancer.
- To increase survival, earlier diagnosis of symptomatic patients is prescribed.
- Upper gastrointestinal series or endoscopy is prescribed to patients over age 50.

Reference

- DOH Philippines. (2005). Health Advisory on Stomach Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://www.beltina.org/health-dictionary/stomach-cancer-symptoms-treatment-survival-rate.html>

Cancer

Thyroid Cancer

Thyroid cancer occurs in the cells of the thyroid, which is located at the base of the neck. This gland normally produces hormones that regulate heart rate, blood pressure, body temperature, and weight. The incidence is three times more in females than in males. Thyroid cancer is the most common cancer among women aged 15-24.

Cause

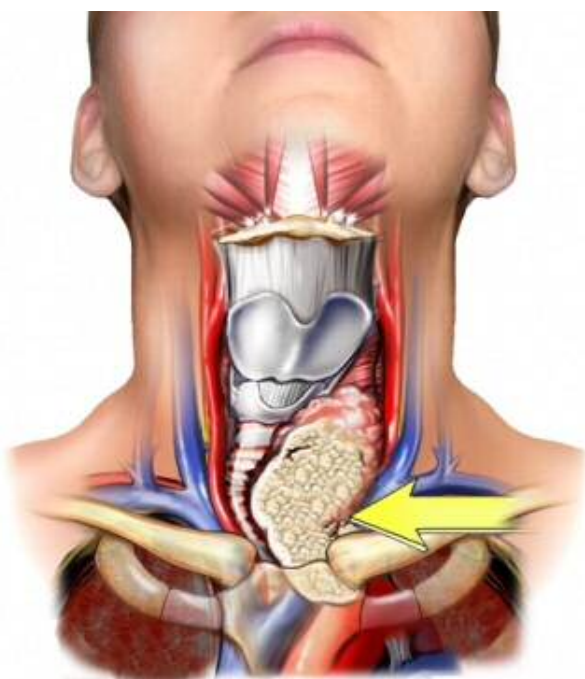
Not clear what causes thyroid cancer

Risk Factor

History of neck radiation during childhood

Signs and Symptoms

- A hard mass in the anterior neck
- Nodules of the thyroid in men



- Rapid enlargement of a long-standing goiter in older patients
- Cervical lymph node enlargement
- Hoarseness
- Difficulty in swallowing
- Difficulty in breathing associated with goiter

Treatment

- Almost 95% of thyroid cancer cases in the Philippines are well differentiated carcinoma, and are highly curable by appropriate surgery alone.
- Radioactive iodine is the main mode of treatment for metastatic lesions.

Prevention/Early Detection

This is possible through fine needle aspiration biopsy of solitary nodules, or of unusually prominent, hard, or rapidly growing nodules in multinodular goiter.

Reference

- DOH Philippines. (2005). Health Advisory on Thyroid Cancer.
- Philippine Cancer Society. (2011). Accessed from <http://www.philcancer.org.ph/>

Image from <http://medicine.med.nyu.edu/medonc/node/547>



Epilepsy

Epilepsy is a brain disorder characterized by repeated seizures (“fits”), which may take many forms—ranging from the shortest lapse of attention to severe and frequent convulsions.



Causes

- Excessive electrical discharges in a group of brain cells
- Seizures caused by any kind of brain disease (e.g., infection, injury, vascular tumor, congenital and degenerative diseases)
- Imbalance of the chemical neurotransmitter in the brain
- Some provocative factors in some patients, like photic stimulation (disco lights, television, computers, etc.)
- Over breathing
- Over hydration
- Loss of sleep
- Emotional and physical stress

Signs and Symptoms

- Temporary symptoms:
 - Loss of awareness/consciousness
 - Disturbances of movement
 - Sensation (including vision, hearing and taste)
 - Mood and mental function
- More physical problems, such as fractures and bruising
- Higher rates of other diseases or psychosocial issues and conditions, like anxiety and depression

Attacks may vary in frequency from less than one per year to several per day.

Treatment

About 70% of newly diagnosed cases can be successfully treated with an anti-epileptic medication that is taken without interruption.

Prevention

Avoid head trauma and birth anoxia (inadequate levels of oxygen in the tissues). Most epileptic syndromes, however, cannot be prevented.

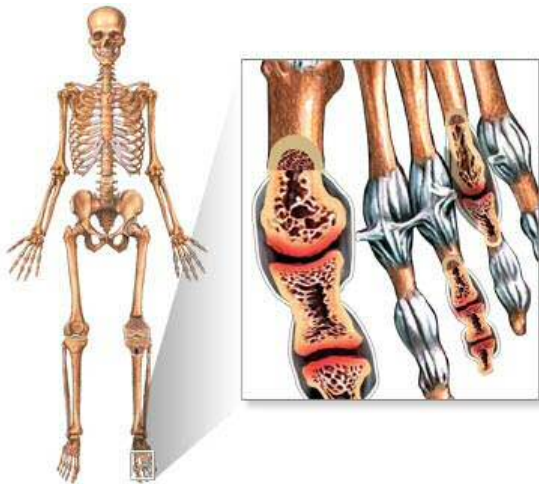
References

- DOH Philippines. (2005). Health Advisory on Epilepsy.
- Wedro, Benjamin C. MD. (2011). Epilepsy (seizure Disorder) Retrieved from <http://www.medicinenet.com/seizure/article.htm>

Image from <http://technorati.com/lifestyle/family/article/a-risky-pair-autism-and-epilepsy/>

Osteoarthritis

Also known as degenerative arthritis, osteoarthritis is a type of arthritis caused by the breakdown and eventual loss of the cartilage of one or more joints. Cartilage is a protein substance that serves as a “cushion” between the bones of the joints.



Causes

- Aging
- Obesity
- Repeated trauma or surgery to the joint structures
- Abnormal joints at birth (congenital abnormalities)
- Gout
- Diabetes
- Hormone disorders

Signs and Symptoms

- Pain and stiffness in the affected joint(s)
- Swelling, warmth, and creaking of the affected joint(s)

- Complete loss of the cartilage cushion (causes friction between bones, resulting in pain at rest or pain with limited motion)

Treatment

There is no specific treatment yet to halt cartilage degeneration or to repair damaged cartilage.

Prevention

- Reduce weight.
- Avoid activities that exert excessive stress on the joint cartilage.

Reference

Shiel, William Jr. (2011). Osteoarthritis Retrieved from <http://www.medicinenet.com/osteoarthritis/page4.htm#treated>

Image from <http://pennstatehershey.adam.com/content.aspx?productid=28&pid=28&gid=000088>

Osteoporosis

Osteoporosis is a condition characterized by a decrease in the density of bone, thereby decreasing its strength and resulting in fragile bones.

Causes

- Poor nutrition (low-calcium diet)
- Lack of exercise
- Smoking
- Malabsorption of nutrients
- Hormonal conditions (low levels of estrogen or testosterone)

Signs and Symptoms

Present without any signs and symptoms until bone fractures

Treatment

- Medications that stop bone loss and increase bone strength may be given. These include alendronate, risedronate, raloxifene, ibandronate, calcitonin, zoledronate, and denosumab.
- Medications that increase bone formation, such as teriparatide, may also be given.

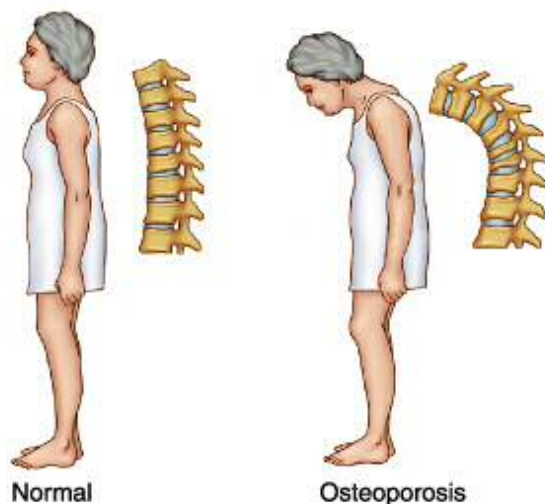
Prevention

Change unhealthy lifestyle habits (e.g., quitting smoking).

Reference

Shiel, William Jr. (2011). Osteoporosis. Retrieved from <http://www.medicinenet.com/osteoporosis/page5.htm#toci>

Image from <http://www.mdguidelines.com/osteoporosis>



Cerebrovascular Disease (Stroke)

Cerebrovascular disease, also known as stroke, is an interruption of the blood supply to any part of the brain. A stroke is sometimes called a “brain attack.”

Causes

- Blocked blood vessel in the brain due to blood clot that forms around the buildup of fatty deposits on the inner walls of blood vessels or blockage due to a travelling particle or debris in the blood stream originating from elsewhere (ischemic stroke)
- Accumulation of blood anywhere within the skull due to bursting or rupture of blood vessels (hemorrhagic stroke)

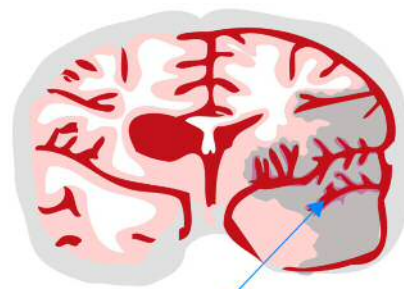
Risk Factors

- Diabetes
- Family history of stroke
- Heart disease/hypertension
- High cholesterol
- Increasing age
- Alcohol intake
- Smoking
- Unhealthy diet

Signs and Symptoms

- Numbness or sudden weakness of the face, arm, or leg, especially on one side of the body
- Confusion/difficulty speaking or understanding speech

- Feeling light-headed/dizziness/fainting/unconsciousness
- Feeling sick or vomiting
- Difficulty walking/loss of balance or coordination
- Difficulty seeing with one or both eyes
- Severe headache with no known cause



Blood vessel bursting in brain



Treatment/Prevention

Treatment for cerebrovascular disease depends on the individual, the nature of the disease, and the severity of the disease.

- Bring immediately the patient suspected of suffering from stroke to an emergency room of a health facility for treatment to be administered right away. Early diagnosis and early treatment will mean better neurological outcome for the patient.
- A thorough physical and neurological evaluation will be done by emergency room physicians or a team of neurologists and/or neurosurgeons.
- A CT scan of the brain is recommended for better management of the patient's condition.
- Specialized care for acute stroke patients should be continued from the emergency room to the ward.
- Physical therapy and speech therapy are



adjunctive treatments to regain patient's function prior to stroke.

Prevention

- Eat a healthy diet.
- Engage in regular physical activity.
- Maintain a healthy weight.
- Control blood pressure.
- Control blood sugar.
- Quit smoking.
- Drink alcohol in moderation.
- Avoid chronic stress or anger.

References

- Weiss, Thomas C. (2009). Cerebrovascular Disease - Facts, Diagnosis, and Treatment. Retrieved from <http://www.disabled-world.com/health/neurology/stroke/cerebrovascular-disease.php>
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Image from <http://www.heartzine.com/heart-disease/Stroke.html>

Chronic Obstructive Pulmonary Disease (COPD)

Chronic Obstructive Pulmonary Disease (COPD) is a life-threatening chronic lung disease; it includes emphysema and chronic bronchitis that cause airflow blockage leading to breathing-related problems. Emphysema is due to the damaged and inflamed air sacs on the lungs. Chronic bronchitis refers to inflammation of large airways producing lots of mucus (phlegm), resulting in blockage. It is common among people aged 40 or older.

Causes/ Risk factors

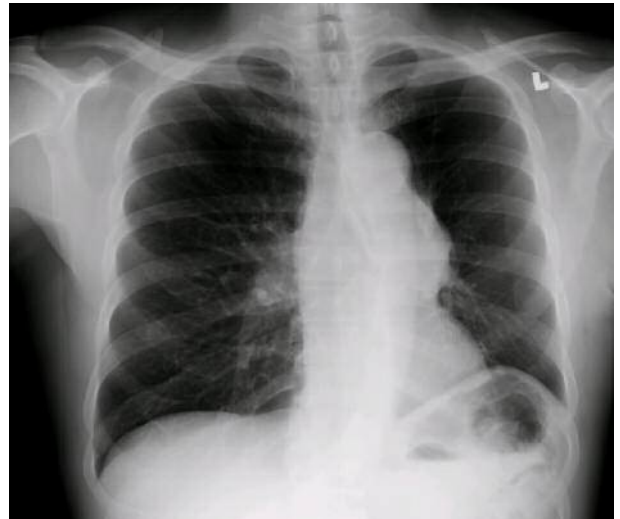
- Tobacco smoking
- Indoor air pollution (such as biomass fuel used for cooking and heating)
- Outdoor air pollution
- Occupational dusts and chemicals (vapors, irritants, and fumes)

Signs and Symptoms

- Chronic cough with phlegm
- Breathlessness
- Wheezing

Treatment

- A diagnostic test called “spirometry” can confirm COPD. It measures how much air a person can inhale and exhale, and how fast air can move into and out of the lungs,
- COPD is not curable.
- Various forms of treatment can help control its symptoms and improve quality of life for people with the illness.



- Medicines that help dilate major air passages of the lungs can improve shortness of breath.

Prevention

- Quit smoking.
- Avoid secondhand smoke.
- Get rid of home and workplace air pollutants.
- Avoid getting respiratory infections.
- Get influenza and pneumococcal vaccination.

References

- Centers for Disease Control and Prevention (2012). Chronic Obstructive Pulmonary Disease (COPD). Retrieved from <http://www.cdc.gov/copd/>
- World Health Organization Media Centre (2012). Chronic Obstructive Pulmonary Disease (COPD). Retrieved from <http://www.who.int/mediacentre/factsheets/fs315/en/index.html>

Image from <http://www.clinicalcorrelations.org/?p=55>

Coronary Artery Disease

Coronary Artery Disease (CAD) is the blockage of one or more arteries that supply blood to the heart. This is usually due to accumulation of atheromatous plaques and hardening of the arteries, also called atherosclerosis.

Causes/Risk Factors

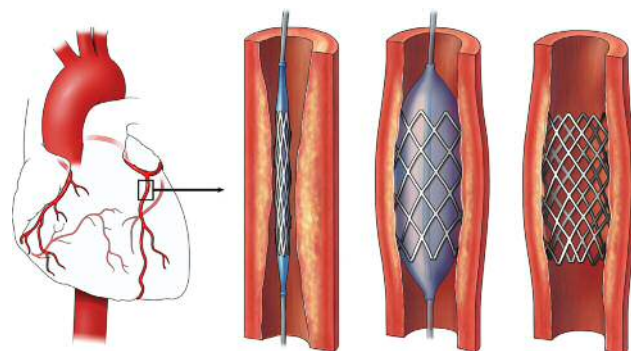
- Heredity
- High levels of cholesterol in the blood
- Smoking
- Diabetes
- Obesity
- High blood pressure
- High-fat diet
- Lack of exercise
- Emotional stress

Signs and Symptoms

- Cardiac arrest
- Chest pain/discomfort that may radiate to shoulders, arms, neck, jaw, or back (usually left side) and tends to get worse during exertion (physical activity/exercise)
- Shortness of breath
- Palpitations (rapid or strong heartbeat)
- Irregular heartbeat
- Dizziness or fainting

Treatment

- Medical treatment includes lowering cholesterol levels, as well as control of blood pressure and diabetes.
- Invasive cardiovascular interventions, such as the use of stents, are also done.



Prevention

Lifestyle change is the most effective way to prevent heart disease:

- Eat a healthy/balanced diet.
- Engage in regular physical activity.
- Lower fat intake.
- Lower blood cholesterol.
- Control high blood pressure and diabetes.
- Quit smoking.
- Lower alcohol intake.

References

- Centers for Disease Control and Prevention (2012). Heart Disease. Retrieved from <http://www.cdc.gov/HeartDisease/>
- National Institutes of Health. (2012). What is Coronary Artery Disease? Retrieved from <http://www.nhlbi.nih.gov/health/health-topics/topics/cad/>
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Image from <http://clinispot.blogspot.com/2010/12/taking-omeprazole-or-ppi-and.html>

Heat Stroke

Heat stroke is the most severe form of heat illness when the body overheats and cannot cool down. The body cannot take off the excessive heat by sweating because of dehydration and/or humid environment.



Causes/Risk Factors

- Hot and humid weather
- Vigorous exercise in hot weather
- Dehydration
- Too much direct exposure to the sun
- Infants, the elderly, athletes, and individuals who work outside

Signs

May start with the following signs of heat exhaustion:

- Warm, flushed skin
- Faintness
- Dizziness
- Weakness
- Headache
- Very high fever of 41°C
- Rapid heartbeat
- Convulsion
- Unconsciousness

Treatment

- *Emergency measures:*
Move the person to a shady spot or indoors and have him/her lie down with legs elevated. If able to drink liquids, have him/her sip cool water. Remove clothing, apply cool water to the skin, and fan the person. Apply ice packs to the armpits, wrists, ankles, and groin.
- Heat stroke is a medical emergency! Bring the patient immediately to the hospital after instituting emergency measures.

Prevention

During very hot and humid weather:

- Limit the amount of time you spend outdoors.
- Drink plenty of water.
- Avoid tea, coffee, soda, and alcohol.
- Wear a wide-brimmed hat and long-sleeved clothing when outdoors.
- Schedule heavy-duty activities for the beginning or end of the day, when it's cooler.

References

- DOH Philippines. (2005). Health Advisory on Heat Stroke.
- Stoppler, Melissa MD. (2011). Heat Stroke. Retrieved from http://www.medicinenet.com/heat_stroke/article.htm
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Image from http://www.myfreetalking.com/jsp/community/english_view.jsp?idx=775



High Blood Pressure or Hypertension

High blood pressure or hypertension is most common among the diseases of the cardiovascular system. It is also one of the major risk factors in the development of stroke. The kidneys are also involved in the control of blood pressure.



Causes/Risk Factors

- Increasing age (above 40 years old for males; menopausal age for female)
- Smoking
- Overweight
- Chronic stress
- Heavy alcohol consumption
- High serum cholesterol level
- Family history of heart disease, diabetes, and kidney disease

Signs and Symptoms

- Often has no symptoms (also called a “silent killer”)
- Some people may develop the following:
 - Headache
 - Dizziness
 - Blurred vision
 - Nausea and vomiting
 - Chest pain and shortness of breath

- Chronic high blood pressure may cause:
 - Heart attack;
 - Heart failure;
 - Stroke or transient ischemic attack (TIA);
 - Kidney failure;
 - Eye damage with progressive vision loss;
 - Leg pain with walking (claudication) due to peripheral arterial disease; and
 - Aneurysms.

Treatment

- Anti-hypertensive medications to control and maintain blood pressure are given.

Prevention

- Eat a nutritious, low-salt, low-fat diet.
- Exercise regularly.
- Maintain a healthy weight and if overweight or obese, try to lose weight.
- Drink alcohol in moderation.
- Quit smoking.
- Reduce stress and practice relaxation techniques.

References

- Centers for Disease Control and Prevention. (2011). High Blood Pressure. Retrieved from <http://www.cdc.gov/bloodpressure/>
- Cunha, John MD. (2011). High Blood Pressure (Hypertension). Retrieved from http://www.medicinenet.com/high_blood_pressure/article.htm
- DOH Philippines. (2005). Health Advisory on High Blood Pressure or Hypertension.

Image from <http://article-and-pictures.blogspot.com/2011/04/deal-with-hypertension.html>

Obesity and Overweight



Obesity and overweight are defined as abnormal or excessive fat accumulation that may impair health. The health consequences include: cardiovascular diseases (mainly heart and stroke); diabetes; musculoskeletal disorders (osteoarthritis, a highly disabling degenerative disease of the joints); and cancer (endometrial, breast, and colon).

Causes/Risk Factors

- Increased intake of foods that are high in fat, salt, and sugars but are low in vitamins, minerals, and essential nutrients
- Decreased physical activity due to the sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization

Signs and Symptoms

- Increased weight
- Thickness around the midsection/ presence of extra fat around the waist
- Obvious areas of fat deposits

- Large body frame
- Difficulty in doing daily activities
- Lethargy
- Breathlessness
- A higher than normal body mass index and waist circumference (Body mass index is a measure of an adult's weight in relation to his or her height.)

Prevention/Treatment

- Limit high-calorie food intake.
- Limit sugar intake.
- Eat more fruits and vegetables, legumes, whole grains, and nuts.
- Engage in regular physical activity.
- Achieve energy balance and a healthy weight.

Reference

World Health Organization. (2011). Obesity. Retrieved from <http://www.who.int/topics/obesity/en/>

Image from <http://ultracoolfun.blogspot.com/2011/08/natural-remedies-for-obesity.html>



Diabetes

Diabetes mellitus (DM) is a set of related diseases in which the body cannot regulate the amount of sugar (specifically, glucose) in the blood.

The blood delivers glucose to provide the body with energy to perform all of a person's daily activities.

Types

- Type 1 Diabetes (T1D): The body stops producing insulin or produces too little insulin to regulate blood glucose level.
- Type 2 Diabetes (T2D): The body is partially or completely unable to use this insulin.

Causes/Risk Factors

- High blood pressure
- High blood triglyceride (fat) levels
- Gestational diabetes or giving birth to a baby weighing more than 9 pounds
- High-fat diet
- High alcohol intake
- Sedentary lifestyle
- Obesity or overweight
- Ethnicity, particularly when a close relative had T2D or gestational diabetes
- Aging (Increasing age is a significant risk factor for T2D. Risk begins to rise significantly at about age 45, and rises considerably after age 65.)

Symptoms

- Fatigue
- Unexplained weight loss
- Excessive thirst
- Excessive urination
- Excessive eating
- Poor wound healing
- Blurry vision
- Infections (e.g., urinary tract infection, yeast infections)
- Irritability

Treatment

The following treatments are given:

- Oral hypoglycemic medications; and
- Subcutaneous injection of insulin for Type 1 DM and those with uncontrolled blood sugar.

Prevention

- Maintain a healthy diet.
- Exercise regularly.
- Drink alcohol in moderation.

References

- DOH Philippines. (2005). Health Advisory on High Blood Pressure or Hypertension.
- Ferry, Robert Jr., (2011) Diabetes. Retrieved from http://www.emedicinehealth.com/diabetes/page10_em.htm#Prevention

Image from <http://www.medexsupply.com/blog/uncategorized/diabetes-and-you/>



Depression

Depression is characterized by either depressed mood or markedly diminished interest or pleasure in most activities of the day.



Causes/Risk Factors

- Deregulation of the biologic amines, specifically norepinephrine and serotonin
- First-degree relatives of persons with depressed disorders (2-10 times more likely to have the disorder)
- About 50% concordance rate for monozygotic twins
- Stressful life events (especially loss of significant person)

Signs and Symptoms

- Significant weight loss or weight gain
- Difficulty in sleeping or oversleeping
- Fatigue or loss of energy
- Psychomotor agitation and slowness
- Excessive guilt or feeling of worthlessness
- Diminished ability to think or concentrate or indecisiveness; recurrent thoughts of deaths and recurrent suicidal ideations

Treatment

- Antidepressant medications are prescribed.
- Psychological interventions may be administered. These include cognitive therapy, behavior therapy, interpersonal therapy, and family therapy .

References

- DOH Philippines. (2005). Health Advisory on Depressive Disorders.
- Lee, Dennis MD and Dryden-Edwards, Roxanne MD. (2011). Depression. Retrieved from <http://www.medicinenet.com/depression/article.htm>
- Psychology Today. (2011). Depressive Disorders. Retrieved from <http://www.psychologytoday.com/conditions/depressive-disorders>

Image from <http://www.aspergersphere.com/category/stress-management/>



Substance Abuse

Alcohol

Alcohol abuse is a disease characterized by the sufferer having a pattern of drinking excessively despite the negative effects of alcohol on his/her work and other aspects of life (medical, legal, educational, and/or social).

Causes/Risk Factors

Complex group of genetic, psychological, and environmental factors:

- First-degree relatives afflicted with alcohol-related disorders are 3-4 times likely to have the disorder.
- According to psychoanalytic theory, people with harsh superego and are self-punitive turn to alcohol to diminish unconscious stress.
- Conduct disorders and other childhood disorders increase risk of alcohol-related disorders in adults.

Signs and Symptoms

- Smell of alcohol on breath or skin
- Flushed skin
- Bloodshot eyes
- Deterioration in person's appearance or hygiene
- Decreased ability to pay attention
- Propensity toward memory loss

Mental disorder recognizable through the following symptoms:

- Strong and persistent desire to drink alcohol
- Inability to control drinking

- Passive or argumentative behavior
- Higher priority given to alcohol consumption than other obligations
- Tolerance to alcohol
- Physical withdrawal reaction when alcohol is abruptly discontinued

Treatment

- Treatment can be done in community settings.
- Prognosis is good if a person is pressured into treatment.
- A patient who comes for voluntary treatment has the best prognosis.
- Voluntary mutual help organizations play a large role in the treatment.
- Medical, individual, and familial interventions are also important.

Prevention

- There should be adequate parental supervision to prevent underage alcohol abuse.
- Alcohol control policies should be in place.
- Situations associated with alcohol use must be avoided.
- Situations associated with alcohol use must be substituted with other activities.

References

- DOH Philippines. (2005). Health Advisory on Substance Abuse: Alcohol.
- Dryden-Edwards, Roxanne MD. (2011). Alcoholism and Alcohol Abuse. Retrieved from http://www.medicinenet.com/alcohol_abuse_and_alcoholism/article.htm
- MayoClinic. (2011). Alcoholism. Retrieved from <http://www.mayoclinic.com/health/alcoholism/DS00340>

Substance Abuse

Ecstasy and Other Abused Substances

Ecstasy (3,4-methylenedioxymphetamine) is a prohibited drug that belongs to the addictive amphetamine group and has been abused as stimulant. Its street names are: “Love Drug” X-tacy; XTC MDMA ADAM; Rave Flying Saucer; and LBD “Libido.”

Other abused substances include stimulants, sedatives, narcotics, and hallucinogens.

Causes

- Mental health conditions with symptoms of anxiety and depression
- Conditions related to drug usage, intoxication, and overdose

Signs and Symptoms

- Nausea
- Chills
- Involuntary teeth clenching
- Cramped or tensed muscles
- Blurred vision
- Excitement and increased energy
- Confusion
- Sweating
- Dry mouth
- Dilated pupils

Effects

May vary from person-to-person:

- Increase in confidence
- Feelings of well-being
- Feelings of closeness to others, hence the term “love drug”
- Anxiety

- Floating sensations
- Irrational behavior
- Hallucinations

Treatment

Ecstasy abuse may be addressed through:

- Drug treatment;
- Abstinence;
- Detoxification; and
- Counseling and behavior modification.



Prevention

- There must be adequate parental supervision.
- Ecstasy control policies must be implemented.
- Situations that might encourage ecstasy use (e.g., partying) must be avoided.
- Healthier activities or hobbies must be encouraged.

References

- AddictionSearch. (2011). Ecstasy Addiction, Abuse, and Treatment. Retrieved from http://www.addictionsearch.com/treatment_articles/article/ecstasy-addiction-abuse-and-treatment_31.html
- DOH Philippines. (2005). Health Advisory on Substance Abuse: Ecstasy.
- Dryden-Edwards, Roxanne MD. (2011). Alcoholism and Alcohol Abuse. Retrieved from http://www.medicinenet.com/alcohol_abuse_and_alcoholism/article.htm
- MayoClinic. (2011). Drug Addiction. Retrieved from <http://www.mayoclinic.com/health/drug-addiction/DS00183>

Image from <http://www.drugfreeworld.org/drugfacts/ecstasy/can-i-get-addicted.html>

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SECTION C
PHILIPPINE HEALTH ADVISORIES

Family Health

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Essential Intrapartum and Newborn Care (EINC)

Essential Intrapartum and Newborn care (EINC) is a package of evidence-based practices recommended by the Department of Health (DOH), Philippine Health Insurance Corporation (PhilHealth), and the World Health Organization (WHO) as the standard of care in all births by skilled attendants in all government and private settings.

It is a basic component of DOH's Maternal, Newborn and Child Health and Nutrition (MNCHN) strategy. The EINC practices for newborn care constitute a series of time-bound, chronologically-ordered, standard procedures that a baby receives at birth. At the heart of the protocol are four time-bound interventions: immediate drying; skin-to-skin contact followed by clamping of the cord after 1-3 minutes; non-separation of baby from mother; and breastfeeding initiation.

1. Immediate drying

Using a clean, dry cloth, thoroughly dry the baby, wiping the face, eyes, head, front and back, arms and legs.



2. Skin-to-skin contact

- If a baby is crying and breathing normally, avoid any manipulation, such as routine suctioning, that may cause trauma or introduce infection. Place the newborn prone on the mother's abdomen or chest skin-to-skin.
- Cover newborn's back with a blanket and head with a bonnet. Place identification band on ankle.

3. Proper cord clamping and cutting

- Clamp and cut the cord after cord pulsations have stopped (typically at 1-3 minutes).
- Put ties tightly around the cord at 2 centimeters and 5 centimeters from the newborn's abdomen.
- Cut between ties with sterile instrument.



- Observe for oozing blood.
- Do not milk the cord towards the newborn.
- After cord clamping, ensure oxytocin 10 IU IM is given to the mother

4. Non-separation of baby from mother and breastfeeding initiation

- Observe the newborn. Only when the newborn shows feeding cues (e.g., opening of mouth, tonguing, licking, rooting), make verbal suggestions to the mother to encourage her newborn to move toward the breast (e.g., nudging).
- Counsel on positioning and attachment.
- When the baby is ready, advise the mother to:
 - a. Make sure the newborn's neck is neither flexed nor twisted.
 - b. Make sure the newborn is facing the breast, with the newborn's nose opposite her nipple and chin touching the breast.
 - c. Hold the newborn's body close to her body.
 - d. Support the newborn's whole body, not just the neck and shoulders.
 - e. Wait until her newborn's mouth is opened wide.
 - f. Move her newborn onto her breast, aiming the infant's lower lip well below the nipple.
- g. Look for signs of good attachment and suckling:
 - Mouth wide open
 - Lower lip turned outward
 - Baby's chin touching breast
 - Suckling is slow, deep with some pauses
 - If the attachment or suckling is not good, try again and reassess.

Notes

- Health workers should not touch the newborn unless there is a medical indication.
- Do not give sugar water, formula or other prelacteals.
- Do not give bottles or pacifiers.
- Do not throw away colostrum.

References

- WHO EINC Briefer. (2011). Essential Intrapartum and Newborn Care (EINC): Saving mothers' and newborns' lives by translating evidence to practice.
- World Health Organization. (2009). Newborn Care Until the First Week of Life

Image from <http://www2.wpro.who.int/sites/RegionalHepBControl/news/photo/>

Newborn Screening



Newborn screening is a simple procedure to find out if baby has a congenital metabolic disorder that may lead to mental retardation and even death if left untreated.

Importance of Newborn Screening

Newborn screening allows for early detection of disorders. If detected, treatment may be done immediately. The goal of newborn screening is to give all newborns a chance to live normal lives and safeguard them to reach their full potential.

How the Test is Done

1. Screening is done within 48 hours or at least 24 hours from birth but not later than 3 days after complete delivery. A newborn placed in intensive care may be exempted

from the 3-day requirement but must be tested by 7 days of age.

2. A few drops of blood is drawn from pricking the baby's heel.
3. Then it is blotted on a special absorbent card and dried for at least 4 hours.
4. The procedure may be done by the physician, nurse, midwife, or medical technologist.
5. If a screening test suggests a problem, the baby's doctor will follow up with further testing. If those tests confirm a problem, the doctor may refer the baby to a specialist for treatment. Following doctor's treatment plan can save the baby from lifelong health-related and developmental problems.

References

- Department of Health Philippines. Administrative Order No. 121 s. 2003 "Strengthening Implementation of the National Newborn Screening System."
- Department of Health Philippines. What is Newborn Screening?
- U.S. National Library of Medicine. (2011). Newborn Screening. Retrieved from <http://www.nlm.nih.gov/medlineplus/newbornscreening.html>

Image from <http://www2.med.umich.edu/prmc/media/newsroom/details.cfm?ID=1474>



Infant and Young Child Feeding (IYCF)



Breastfeeding is the most ideal way of providing food for the healthy growth and development of infants. It is also an integral part of the reproductive process with important implications for the health of mothers.

Breast milk is an important source of energy and nutrients in children 6-23 months of age. It can provide one-half or more of a child's energy needs between 6 and 12 months of age, and one-third of energy needs between 12 and 24 months.

Appropriate Infant and Young Child Feeding Practices

- **Breastfeeding**

Early Initiation of Breastfeeding

Infants should be initiated to breastfeeding within 1 hour after birth. This will stimulate early onset of full milk production and promote bonding of mother and child.

Exclusive Breastfeeding for the First 6 Months

Infants should be exclusively breastfed for the first 6 months of life to achieve optimum growth and development. Exclusive breastfeeding means giving breastmilk alone and no other foods or drinks, not even water, with the exception of vitamins and medicine drops.

Continued Breastfeeding

Extend breastfeeding for up to 2 years of age and beyond.

- **Complementary Feeding**

Provide nutritionally adequate and safe complementary foods to meet the infant's evolving nutritional requirements after 6 months of age.

Guiding Principles for Appropriate Complementary Feeding

1. Continue frequent, on demand breastfeeding until 2 years old and beyond.



2. Practice responsive feeding (e.g., feed infants directly and assist older children).
3. Feed slowly and patiently; encourage them to eat but do not force them; talk to the child and maintain eye contact.
4. Practice good hygiene and proper food handling.
5. Start at 6 months with small amounts of foods and increase gradually as the child gets older.
6. Gradually increase food consistency and variety.
7. Increase the number of times that the child is fed, 2-3 meals per day for infants 6-8 months of age, and 3-4 meals per day for infants 9-23 months of age, with 1-2 additional snacks as required.
8. Feed a variety of nutrient-rich foods.
9. Use fortified complementary foods or vitamin-mineral supplements, as needed.
10. Increase fluid intake during illness, including more breastfeeding, and offer soft, favorite foods.

- **Feeding in Exceptionally Difficult Circumstances**

1. *Malnourished infants:* Continue breastfeeding frequently and relactate.
2. *Preterm or low birth weight infants:* Feed every 2 hours during day and night; keep baby close to mother's breast.

3. **Feeding during emergencies**

- Continue breastfeeding if possible.
- If breastfeeding is not possible, provide breast milk from milk bank. Provide properly prepared breast milk substitutes. Practice complementary feeding—prepare food properly and use safe drinking water.

References

- Department of Health Philippines. Administrative Order No. 2005-0014 "National Policies on Infant and Young Child Feeding."
- Department of Women and Child Development Government of India. (2004). National Guidelines on Infant and Young Child Feeding. Retrieved from <http://wcd.nic.in/nationalguidelines.pdf>
- World Health Organization. (2011). Infant and Young Child Feeding Retrieved from <http://www.who.int/mediacentre/factsheets/fs342/en/>

Image from <http://www.unicef.org/philippines/downloads/BFPoster1.jpg>



Breastfeeding

Breastfeeding is the best way of providing ideal food for the healthy growth and development of babies. It has many benefits for the infant and the mother.

Benefits of Breastmilk/Breastfeeding:

- It provides all the energy and essential nutrients from birth up to 6 months of life.
- The first few drops of breast milk called colostrum contains antibodies that protect babies against infectious and chronic diseases, such as diarrhea or pneumonia.
- It strengthens the bond between mother and child.
- It reduces the risk of ovarian and breast cancer of the mother.
- It helps space pregnancies due to the hormonal effect which often induces cessation of menstruation.

Ten Steps to Successful Breastfeeding

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy on breastfeeding within the first 6 months upon entry into the hospital.
3. Inform all pregnant women about the benefits and management of breastfeeding during prenatal consultations. After delivery, reiterate

breastfeeding benefits in the wards during postpartum period.

4. Help mothers initiate breastfeeding within half-an-hour of birth by placing the newborn on skin-to-skin contact.
5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.
6. Do not give newborn infants food or drink other than breast milk, unless medically indicated. Educate mothers on the importance of exclusive breastfeeding.
7. Practice rooming-in. That is, allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Do not give artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them upon discharge from the hospital or clinic.

Complementary Feeding

Giving other foods in addition to milk after 6 months of age

- Feed slowly and patiently; encourage your baby to eat but do not force him/her.
- Practice good hygiene and proper food handling.
- Start at 6 months with small amounts of food and increase gradually as the child gets older.
- Feed a variety of nutritious foods.
- Continue breastfeeding on demand until 2 years old and beyond.

Breastfeeding Positions



Front hold or cradle position



Underarm position or footy hold



Lying down position

Laws that Protect and Support Breastfeeding

- Executive Order No. 51: National Code of Marketing of Breastmilk Substitutes**
 This code calls for intensifying dissemination of information on breastfeeding and proper nutrition. It also calls for the regulation of advertising, marketing, distribution of breastmilk substitutes and other related products (including bottles and teats). It prohibits the use of health facilities and health workers in the promotion and marketing of the products covered by the code.
- Republic Act No. 7600: The Rooming-In and Breastfeeding Act of 1992 (later amended by Republic Act No. 10028: Expanded Promotion of Breastfeeding Act)**
 Rooming-in shall be observed within 30 minutes after birth. For normal deliveries, breastfeeding should be done within an hour after birth and for Caesarean deliveries, 3-4 hours after birth to ensure support for early, exclusive, and continuous feeding.
- The Philippine Infant and Young Child Feeding (IYCF) Policy as adopted from WHO and UNICEF**
 The “2002 Global Strategy on Infant and Young Child Feeding” calls for a renewed and accelerated action toward the promotion of appropriate IYCF practices.
- PHIC Circular No. 26 s. 2005: Mother-Baby Friendly Hospital Initiative**
 As part of its accreditation requirements for all hospitals, this initiative encourages, supports, and promotes breastfeeding in the primary, secondary, and tertiary levels



of hospital facilities, recognizing that breastfeeding is essential for the health and well-being of the infant and the mother.

- *DOH Administrative Order No. 2005-0023: Formula One for Health as the Implementing Mechanism for Health Sector Reforms*
Breastfeeding Program is one of the priorities for Public Health Program Development.
- *1989 United Nations Convention on the Rights of the Child (Article 24)*
This article emphasizes the children's right to the highest attainable level of healthcare services and guarantees the provision of and access to adequate nutrition for all infants and young children.

References

- Department of Health Philippines. Administrative Order No. 2007-0026. "Revitalization of the Mother-Baby Friendly Hospital Initiative in Health Facilities with Maternity and Newborn Care Services."
- Department of Health. (2010). Advantages of Breastfeeding. Retrieved from <http://www.doh.gov.ph/chd1/files/PDFs/health%20advisorie/breastfeeding.pdf>
- World Health Organization. Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services, a joint WHO/UNICEF statement

Child Health

Top Causes of Illness among Infants

Infectious Diseases

- Pneumonia
- Measles
- Diarrhea
- Meningitis
- Septicemia
- Nutritional deficiencies
- Birth-related complications

Top Leading Causes of Death among Neonates and Children under 5 Years (WHO Western Pacific Region)

- Neonatal deaths: 54%
 - Preterm complications
 - Birth asphyxia
 - Neonatal sepsis
 - Neonatal pneumonia
 - Congenital abnormalities
- Pneumonia: 14%
- Other conditions: 10%
- Non-communicable diseases: 9%
- Injuries: 8%
- Diarrhea: 4%
- Measles: 1%

Child Health Programs

- Garantisadong Pambata Program (DOH Administrative Order No. 36 s. 2010) aims to provide a comprehensive and integrated package of services and communication on health, nutrition, and environment to children available every day at various settings, such as home, school, health facilities, and communities by government



and non-government organizations, private sectors, and civic groups.

- Expanded Program of Immunization (EPI) aims to reduce infant and child mortality due to vaccine-preventable diseases (tuberculosis, Hepatitis B, diphtheria, tetanus, pertussis, poliomyelitis, pneumonia, meningitis, and otitis media due to Hemophilus influenza type B, measles, mumps, rubella, and severe diarrhea due to Rotavirus).
- Integrated Management of Childhood Illness (IMCI) aims to reduce morbidity and deaths due to common childhood illness. The major interventions are prevention and appropriate management of common childhood illnesses: pneumonia; diarrhea; malaria; measles; dengue; hemorrhagic fever; ear infections; and malnutrition.



The IMCI strategy has been adopted nationwide and integrated into the medical, nursing, and midwifery curricula.

- Child injury prevention aims to reduce the incidence, severity of, and deaths associated with child injuries at home, in the community, schools, and roadways. The priority injury causes are road traffic injuries, burns and scalds, drowning, falls, and poisoning. Safety assessment checklists for the home, school, and community are being promoted so that proper interventions for preventing injury are recommended and implemented.
- Enhanced Implementation of Growth Monitoring and Promotion (GMP) using WHO-CGS (Child Growth Standard) assesses the nutritional status of children through their growth and development by measuring their weights and heights regularly. Standard measurement indicators are: weight-for-age; length/height-for-age; and weight-for-length/height.

References

- Child Health and Development Strategic Plan Year 2001-2004
- Department of Health Philippines. Administrative Order No. 0015. "Revised Policy on Child Growth Standard."
- Department of Health Philippines. Administrative Order No. 39 s. 2003. "Policies on the Nationwide Implementation of the Expanded Program on Immunization."

Image from <http://www.medicaid.ms.gov/MaternalChildHealth.aspx>

Adolescent Health

Many adolescents between the ages of 10 and 19 years old suffer serious health and safety issues, such as accidents, suicide, violence, substance abuse, and risky sexual behaviors that are either preventable or treatable. Moreover, their behavior and lifestyle choices greatly affect their future health. For example, smoking, poor eating habits, and lack of exercise lead to premature death. Environment factors, such as family, peer group, school, and community may also contribute to adolescents' health and risk behaviors.



Trouble Signs in Adolescence

- Sexual promiscuity
- Regular use of drugs and alcohol
- Repeated violation of the law or school regulations
- Running away more than once in 3 months
- Skipping school more than once in 3 months
- Aggressive outbursts/impulsiveness
- Dark drawings or writings
- Deterioration in hygiene
- Oppositional behavior
- Refusal to work/non-compliance
- Chronic lateness
- Falling asleep in class
- Changes in physical appearance
- Excessive daydreaming

What Younger People Can Do to Stay Healthy

- **Eat a well-balanced diet.** A variety of fruits and vegetables in the right amounts will provide proper nutrition.
- **Keep the right weight.** Desirable weight is the weight that is best for the normal functioning of the body based on height and build.
- **Exercise regularly.** Engage in sports or any physical activity.
- **Get plenty of rest and sleep.**
- **Say NO to smoking.**
- **Say NO to drugs and alcohol.**
- **Practice good hygiene.** Take a bath every day. Brush your teeth and wash all parts of your body. Use a clean towel.
- **Share feelings with parents and friends.** Talk to them if help is needed.
- **Learn responsible sexual behavior.** Practice safe sex to avoid unwanted consequences (i.e., sexually transmitted diseases and pregnancy).



- **Stay away from hazards.** Observe safety at school and play. Avoid overexposure to sunlight, as well as excessive heat and cold. Do not swim in unfamiliar beaches, lakes, or rivers.
- **Follow road safety rules.** Observe road and pedestrian signs. Always drive carefully—keep to legal speed limits, do not text, and do not drink while driving. When walking, use the sidewalk and take great care in crossing streets by following pedestrian crossing signs and signals.

Reference

Adolescent Job Aid Manual: Desk Reference for Primary Level Health Workers in the Philippine Setting. (2009). Adopted from the World Health Organization in collaboration with the Society of Adolescent Medicine in the Philippines, Inc.

Image from <http://rch.org.au/blogs/cah/2011/06/>

Oral Health

Oral Health is fundamental to overall health, well-being, and quality of life. A healthy mouth enables people to eat, speak, and socialize without pain, discomfort, or embarrassment.

Pain from untreated dental diseases can lead to eating, sleeping, speaking, and learning problems in children and adolescents, which affect social interactions, school achievement, general health, and quality of life.

Most Common Oral Health Diseases in the Philippines

- Dental Caries (tooth decay)
- Periodontal Diseases (gum diseases)

Risk Factors

- Unhealthy diet
- Tobacco use
- Harmful alcohol use
- Poor oral hygiene

Oral Health Practices

- **Promote balanced diet.** The development of sound teeth begins while still in the womb of the mother and continues throughout life. Pregnant and lactating women should have a well-balanced diet. Minimize eating sugary foods.
- **Promote correct eating habits among children.** Start with exclusive breastfeeding from birth up to 6 months and continued breastfeeding up to 2 years with timely, adequate, and safe



complementary foods starting at 6 months.

- **Practice good oral hygiene.** Promote the practice of self-care for oral health.
 - Brush teeth and vigorously rinse mouth after meals.
 - Use fluorides and sealants and good plaque control (can be obtained from fluoridated water, salt, milk, mouthwash, or toothpaste).
 - Brush and floss teeth regularly and properly at least twice a day.
- **Visit the dentist periodically.** Bring young children to visit the dentist as soon as the first tooth erupts (normally 6 months old and every 6 months thereafter).
- **Maintain a healthy lifestyle.** Avoid tobacco smoking, drugs, and alcohol.

References

- Department of Health Philippines. Administrative Order No. 2007-0007. "Guidelines in the Implementation of Oral Health Program for Public Health Services."
- FHO and NCDPC, DOH and WHO

Image from <http://dothansmiles.com/>

Reproductive Health

RA 10354 (An Act Providing for a National Policy on Responsible Parenthood and Reproductive Health) defines reproductive Health (RH) as the state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.

This implies that people are able to have a responsible, safe, consensual, and satisfying sex life, that they have the capability to reproduce, and the freedom to decide if, when, and how often to do so. This further implies that women and men attain equal relationships in matters related to sexual relations and reproduction.

Reproductive Health Care Includes:

- Family planning information and services, which shall include as a first priority making women of reproductive age fully aware of their respective cycles to make them aware of when fertilization is highly probable, as well as highly improbable;
- Maternal, infant, and child health and nutrition, including breastfeeding;
- Proscription of abortion and management of abortion complications;
- Adolescent and youth RH guidance and counseling;
- Prevention, treatment, and management of reproductive tract infections (RTIs), HIV and AIDS, and other sexually transmittable infections (STIs);



- Elimination of violence against women and children, and other forms of sexual and gender-based violence;
- Education and counseling on sexuality and RH;
- Treatment of breast and reproductive tract cancers and other gynecological conditions and disorders;
- Male responsibility and involvement and men's RH;
- Prevention, treatment, and management of infertility and sexual dysfunction;
- RH education for the adolescents; and
- Mental health aspect of RH care.

Reproductive Health Rights

RH rights refer to the rights of individuals and couples to:

- Decide freely and responsibly whether or not to have children; the number, spacing, and timing of their children;
- Make other decisions concerning reproduction, free of discrimination, coercion, and violence;
- Have the information and means to do so; and
- Attain the highest standard of sexual health and RH provided, however, that RH rights do not include abortion, and access to abortifacients.

Reference

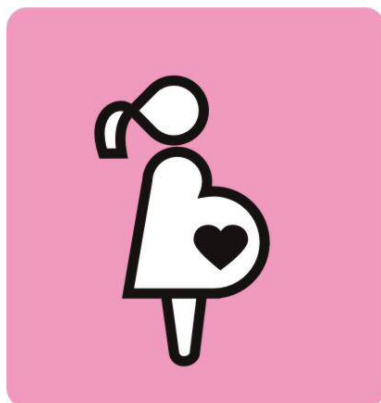
RA No. 10354: An Act Providing for a National Policy on Responsible Parenthood and Reproductive Health



Women's Health

Maternal Health

Maternal health refers to the health of women during pregnancy, childbirth, and the postpartum period.



Maternal Death

Maternal death is defined as death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

Women die from preventable causes related to pregnancy and childbirth. Maternal mortality is higher among women living in rural areas and poorer communities.

Causes

Maternal death is caused by the complications of pregnancy, labor, delivery, and the immediate post-partum period, such as bleeding, infection, pregnancy-related high blood pressure, and difficult labor.

Prevention

Encourage women to:

- Avail themselves of antenatal care in pregnancy, skilled care during childbirth,

and care and support in the weeks after childbirth.

- Visit the health center for checkup as soon as pregnancy is determined and follow health worker's advice relative to antenatal checkups.
- Give birth in a health facility to make sure that she is assisted by a skilled health professional.
- Practice good hygiene at all times.
- If necessary, seek advice from health worker on responsible parenthood, nutrition, and child care.

Leading Causes of Death among Women of Reproductive Age (15–49)

Biological factors, lack of access to information and health services, economic vulnerability, and unequal power in sexual relations that expose young women to infection, particularly HIV

- *Tuberculosis*
Tuberculosis is often linked to HIV infection and the third leading cause of death among women of reproductive age worldwide, particularly in low-income countries.
- *Cervical Cancer*
Cervical cancer is the second most common type of cancer among women, with virtually all cases linked to genital infection with the human papillomavirus (HPV).



- *Chronic Obstructive Pulmonary Disease (COPD)*

Tobacco use and the burning of solid fuels for indoor heating and cooking are the primary risk factors for COPD – a lung ailment – in women. Women prepare most of the family food, hence, the burden of COPD caused by exposure to indoor smoke is over 50% higher among women than among men.

- *Injuries*

Injuries from road traffic accidents figure among the top 10 causes of death among adult women (20-59 years) globally. Burns are a leading cause of death among women aged 15-44. Women, more than men, suffer significantly from fire-related injuries and death due to cooking accidents and domestic violence.

- *Violence*

Women who have been physically or sexually abused have higher rates of mental ill-health, unintended pregnancies, abortions, and miscarriages than non-abused women.

- *Depression and Suicide*

Women are more susceptible to depression and anxiety than men. Mental

disorders following childbirth, including depression, are estimated to affect about 13% of women within a year of delivery. Suicide is the seventh top cause of death globally for women aged 20-59 years.

Leading Causes of Death among Older Women (60 Years and Over)

- Breast, Lung, and Colon Cancer are among the top 10 causes of death of older women globally.
- Cardiovascular disease (mainly heart attacks/ischaemic heart disease and stroke), often thought to be a “male” problem, is the main killer of older women. Women often show different symptoms from men, which contributes to under diagnosis of heart disease in women. Women also tend to develop heart disease later in life than men.

References

- WHO- Media Centre.(2012). Maternal mortality. Retrieved from <http://www.who.int/mediacentre/factsheets/fs348/en/index.html>
- WHO- Media Centre.(2009). Women's health. Retrieved from <http://www.who.int/mediacentre/factsheets/fs334/en/index.html>



Iodine Deficiency Disorder

Iodine is a mineral that is an essential component of thyroid hormones. Thyroid hormones are essential to development and metabolism.

Iodine deficiency disorder refers to the abnormalities that result when the body does not get enough iodine. Iodine deficiency can lead to inadequate production of thyroid hormones from the thyroid gland (hypothyroidism). Thyroid hormones prevent mental retardation, growth restriction, physical deformities, miscarriage, and stillbirths.

Causes

- Lack of iodine-rich foods in the diet and the presence of goitrogens (i.e., cassava and cabbage), which interfere with the absorption of iodine in the body
- Increased requirement of iodine during adolescence, pregnancy, and lactation, which can also cause iodine deficiency



Sign

Goiter

Identified Target Groups for Iodine Supplementation

- **Women of reproductive age**
Among pregnant women, iodine deficiency

may be associated with complications, such as hypothyroidism, gestational abortion, increased first trimester abortions, abnormal fetal positions, and stillbirths.

- **Children of school age**

These children have been shown to have increased demand for iodine because of growth spurts during this period. It is also among this population group that intake of iodine sources from food could be very poor.

Treatment/ Prevention

- Use iodized salt in preparing or cooking food.
- Eat foods rich in iodine, like dilis, pusit, kuhol, lato (seaweeds), talaba, tahong, alamang, shrimps, crab (WHEN THERE IS NO RED TIDE BAN).
- In endemic areas where more than 30% of the population has goiter, take iodine supplement as prescribed by a physician.

References

- Department of Health Philippines. Administrative Order No. 119 s. 2003. "Updated Guidelines on Micronutrient Supplementation (Vitamin A, Iron, and Iodine)."
- DOH Philippines. (2005). Health Advisory on Iodine Deficiency Disorder.
- World Health Organization. (2011). Micronutrient Deficiency. Retrieved from www.who.int/nutrition/topics/idd/en/

Images from:

- <http://www.weserv.org/projects.htm>
- http://bugswong.smugmug.com/Medical-slides/Thyroid-Endocrine-disease/1435726_pdZxmw/68214985_NLv3T34#!i=68257032&k=7BRJdG4&lb=1&s=M

Iron Deficiency Anemia

Iron is an essential trace mineral needed for hemoglobin formation. Iron deficiency is a condition resulting from insufficient iron in the body. It is the most common nutritional deficiency and the leading cause of anemia.

Causes

- Lack of iron-rich foods in the diet
- Lack of vitamin C in the diet, which helps in the absorption of iron by the body
- Chronic blood loss due to parasitism or menstruation
- Increased demand of the body during pregnancy and lactation
- Low absorption of iron from foods
- High requirement of infants, adolescent girls, pregnant and lactating women

Signs

- Weakness
- Insomnia
- Easily becomes tired
- Lack of appetite
- Lack of concentration
- Pallor

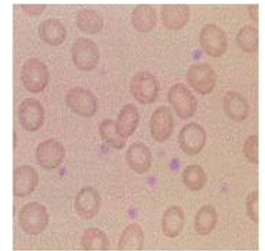
Identified Target Groups for Iron Supplementation

- **Pregnant and lactating women** must take iron supplements for at least 6 months during pregnancy and continue into postpartum period when there is a risk for anemia.
- **Infants (6-11 months of age)** need a relatively high iron intake because they are growing very rapidly. Beyond 6 months, iron content of breastmilk and complementary

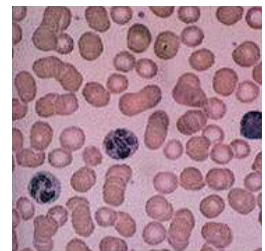
foods is not enough.

Low-birth weight infants should be given iron supplements at 2 months of age.

- **Other population groups, such as anemic and underweight children, adolescents (especially when pregnancy may occur), women of reproductive age, and older persons**



anemia



normal blood

Treatment/Prevention

- Eat foods rich in iron, such as meat, dark green leafy vegetables (i.e., malunggay, kamote tops, gabi leaves, petchay, saluyot, alugbati, kangkong), liver, and internal organs.
- Take iron supplements with folic acid daily as prescribed, especially during pregnancy.
- Eliminate intestinal parasites through deworming.
- Exclusively breastfeed infants up to 6 months and continue breastfeeding up to 2 years and beyond.
- Increase vitamin C intake.

References

- Department of Health Philippines. Administrative Order No. 119 s. 2003. "Updated Guidelines on Micronutrient Supplementation (Vitamin A, Iron, and Iodine)."
- DOH Philippines. (2005). Health Advisory on Iodine Deficiency Disorder.
- World Health Organization. (2011). Micronutrient Deficiencies. Retrieved from www.who.int/nutrition/topics/idd/en/

Image from <http://nursingcrib.com/nursing-notes-reviewer/maternal-child-health/iron-deficiency-anemia/>

Vitamin A Deficiency

Vitamin A is a fat-soluble vitamin. It cannot be synthesized or made in the body and it should be obtained from food.

Vitamin A deficiency (VAD) occurs when one's diet has insufficient vitamin A for meeting the recommended dietary allowance for growth and development and physiological functions.



Causes

- Not eating enough foods rich in vitamin A
- Lack of fat or oil in the diet, which helps the body absorb vitamin A
- Poor absorption or rapid utilization of vitamin A due to illness
- Missing out on breastfeeding (Breastmilk is a good source of vitamin A.)

Signs and Symptoms

- Nyctalopia or night blindness (if child refuses to play in the dark or has difficulty seeing in the dark)
- Bitot's spot (foamy soap sud-like spots on white part of the eye)

- Dry, hazy, and rough-appearing cornea
- Crater-like defect on cornea
- Softened cornea (sometimes bulging)
- Xerophthalmia or dry eyes

Identified Targets for Vitamin A Supplementation

Vitamin A is crucial for child survival among children under 5. It significantly reduces:

- The risk from mortality by 23-24%
- Deaths due to measles by about 50%
- Deaths due to diarrhea by about 40%
- **Universal supplementation**
Supplemental doses must be administered every 6 months to all infants and children aged 6 months to 59 months
- **High-risk children**
Supplementation helps:
 - Reestablish body reserves of children with chronic or repeated infectious disease (e.g., persistent diarrhea, measles, severe pneumonia) or who are severely underweight;
 - Protect against severity of subsequent infections;
 - Reduce complications of measles; and
 - Lower morbidity and mortality due to measles.
- **Postpartum women**
Supplementation helps elevate vitamin A concentration of breastmilk and vitamin A status of breastfed child.



- ***Treatment of xerophthalmia***

Vitamin A must be administered immediately as prescribed.

- ***During emergencies***

Access to vitamin A is extremely poor during emergency situations, such as floods and typhoons. Thus, children are at a very high risk for infectious diseases and other complicating factors.

Treatment

- Daily oral supplements of vitamin A is recommended.
- Vitamin A-rich foods should be consumed. These include liver, eggs, fortified milk, crab fat, cheese, malunggay, gabi leaves, kamote tops, kangkong, alugbati, saluyot, carrots, squash, and ripe mango.
- There is no routine supplementation for pregnant women except for therapeutic dose.

Prevention

- Exclusively breastfeed infants up to 6 months and continue breastfeeding up to 2 years and beyond.
- Maintain a vitamin A-rich diet.
- Take correct dose of vitamin A capsules as prescribed.

References

- Department of Health Philippines. Administrative Order No. 0236. "Immunization, Breastfeeding and Young Child Feeding Practice and Vitamin A Supplementation in Evacuation Centers."
- Department of Health Philippines. Administrative Order No. 119 s. 2003. "Updated Guidelines on Micronutrient Supplementation (Vitamin A, Iron, and Iodine)."
- DOH Philippines. (2005). Health Advisory on Vitamin A Deficiency.
- World Health Organization. (2011). Micronutrient Deficiencies. Retrieved from www.who.int/nutrition/topics/idd/en/

Image from <http://eyepathologist.com/disease.asp?IDNUM=316640>



Neonatal Tetanus

Neonatal tetanus is an acute disease of the nervous system. A child can get infected through unhygienic cutting of umbilical cord and improper handling of cord stump, especially when treated or applied with contaminated substance. The onset of illness is between 3 and 28 days.



Cause

Nerve toxins produced by *Clostridium tetani*, a type of bacteria often found in the soil and in human and animal intestines

Signs and Symptoms

- Lockjaw (muscular stiffness in the jaw)
- Stiffness of the neck
- Difficulty of swallowing
- Muscle spasm
- Fever
- Inability to suck

Complications

- Fracture of spine or other bones as a result of muscle spasms and convulsions
- Pneumonia
- Abnormal heartbeat

Treatment

Antibiotics and antitoxin drugs, as well as sedatives for muscle spasm, are given.

Prevention

- Women of childbearing age (15-49 years old) must be immunized with tetanus toxoid.
- Clean delivery and newborn cord clamping and cutting must be practiced.
- Infants must be immunized with 3 doses of DPT (either DTwP or DTaP) at ages 6 weeks, 10 weeks, and 14 weeks.

References

- Davis, Charles P. (2011). Tetanus. Retrieved from http://www.emedicinehealth.com/tetanus/article_em.htm
- DOH Philippines. (2005). Health Advisory on Vitamin A Neonatal Tetanus.
- World Health Organization. (2011). Tetanus. Retrieved from www.who.int/topics/tetanus/en

Image from http://article.wn.com/view/2011/10/12/Pampers_And_UNICEF_Will_Eliminate_A_Disease_That_Kills_A_Bab/

First Aid

Minor Cuts and Wounds



First Aid

First aid is instant assistance provided to an immediately sick or injured person. The doctor and the hospital may not be always conveniently accessible.

First aid consists of a series of simple, easy, and life-saving actions and techniques that anyone can learn to perform. It should, however, not replace proper medical care.

Minor Cuts and Wounds

Most minor wounds can be treated in the home without further medical attention. However, further medical advice should be sought if: there is a foreign body embedded in the wound; the wound shows sign of infection; and the wound has the potential for tetanus.

Treatment

Follow these steps to treat minor cuts and wounds:

- Wash your hands before treating the wound.
- Check that there is nothing in the wound. If the wound is dirty, clean it under running water.
- Pat dry with clean, non-fluffy material.
- Clean the wound from the center out with gauze swabs or antiseptic wipes, using a fresh piece for each wipe.
- Cover the wound with an adhesive dressing to apply pressure and protect it from infection.
- Elevate the wound, if necessary, to help control bleeding.

Reference

FirstAid.ph. (2011). Minor Wounds. Retrieved from <http://www.firstaid.ph/everyday-first-aid/minor-wounds.html>

Image from <http://school.discoveryeducation.com/clipart/clip/firstaidkit4c.html>



First Aid

Burns

Burns can include: thermal burns, which are caused by contact with flames, hot liquids, hot surfaces, and other sources of high heat; chemical burns; and electrical burns. For burns, immediate care can be life-saving.

Types of Burns

First-Degree Burns involve the top layer of skin. Sunburn is a first-degree burn.

- *Signs*
 - Red
 - Painful to touch
 - Skin to show mild swelling
- *Treatment*
 - Apply cool, wet compresses, or immerse in cool, fresh water. Continue until pain subsides.
 - Cover the burn with a sterile, non-adhesive bandage or clean cloth.
 - Do not apply ointments or butter to burn; these may cause infection.
 - Over-the-counter pain medications may be used to help relieve pain and reduce inflammation.
 - First-degree burns usually heal without further treatment. However, if a first-degree burn covers a large area of the body, or the victim is an infant or elderly, seek emergency medical attention.

Second-Degree Burns involve the first two layers of skin.

- *Signs*
 - Deep reddening of the skin
 - Pain
 - Blisters
 - Glossy appearance from leaking fluid
 - Possible loss of some skin
- *Treatment*
 - Immerse in fresh, cool water, or apply cool compresses. Continue for 10 to 15 minutes.
 - Dry with clean cloth and cover with sterile gauze.
 - Do not break blisters.
 - Do not apply ointments or butter to burns; these may cause infection.
 - Elevate burned arms or legs.
 - Take steps to prevent shock: lay the victim flat; elevate the feet about 12 inches; and cover the victim with a coat or blanket. Do not place the victim in the shock position if a head, neck, back, or leg injury is suspected, or if it makes the victim uncomfortable.
 - Further medical treatment is required.





Do not attempt to treat serious burns unless you are a trained health professional.

Third-Degree Burns penetrate the entire thickness of the skin and permanently destroy tissue.

- **Signs**
 - Loss of skin layers
 - Often painless (Pain may be caused by patches of first- and second-degree burns which often surround third-degree burns.)
 - Skin dry and leathery
 - Skin possibly charred or with patches that appear white, brown, or black.
- **Treatment**
 - Cover burn lightly with sterile gauze or clean cloth. (Do not use material that can leave lint on the burn.)
 - Do not apply ointments or butter to burns; these may cause infection.
 - Take steps to prevent shock: lay the victim flat; elevate the feet about 12 inches.
 - Have person sit up if face is burned. Watch closely for possible breathing problems.
 - Elevate burned area higher than the victim's head when possible. Keep person warm and comfortable, and watch for signs of shock.
 - Do not place a pillow under the

victim's head if the person is lying down and there is an airway burn. This can close the airway.

- Immediate medical attention is required. Do not attempt to treat serious burns unless you are a trained health professional.

Reference

Centers for Disease Control and Prevention. (2010). Mass Casualties: Burns. Retrieved from <http://www.bt.cdc.gov/masscasualties/burns.asp>

Image from <http://www.safekids.co.uk/firstaidburnsscalds.html>



First Aid

Nosebleeding

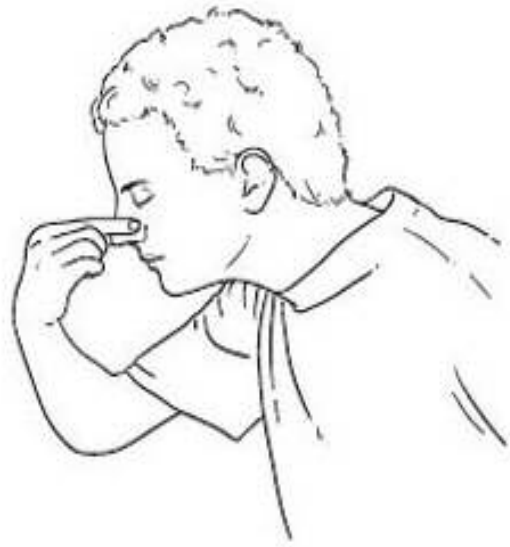
A nosebleed occurs when a small vein, along the lining of the nose, bursts. Most nosebleeds look scary, but are harmless. Nosebleeds are common among children and the elderly, and may be treated at home.

Causes

- Dryness
- Nose picking
- Blowing nose with force
- Use of medications, like aspirin
- Introducing objects into nose (mostly children)
- Injuries
- Allergies
- Infections
- High BP
- Atherosclerosis
- Blood-clotting disorders
- Use of cocaine

Types of Nosebleeds

- **Anterior Nosebleed**
 - Affects lower part of wall that separates nostrils; wall or septum contains blood vessels that can be broken by blow to nose/fingernail
 - Bleeding starts from front of nose; flows outward when person is sitting/standing
 - Occurs during dry season/very cold weather



- **Posterior Nosebleed**
 - Bleeding starts deep within the nose; flows down the back of the mouth and throat
 - Happens even when the person is sitting/standing
 - Occurs in old people/those with high blood pressure/injuries
 - Severe and requires medical help

Treatment

Follow these steps to treat nosebleeding:

- Stay calm. Most nosebleeds can be treated at home.
- Sit down and slightly lean forward.
- Keep the head above the chest (above the heart) to reduce the bleeding.



- Lean forward so the blood will drain out of your nose instead of down the back of your throat. Do not lean back, you may swallow the blood. This can irritate your stomach.
- Use your thumb and index finger to squeeze together the soft portion of your nose for at least 5 minutes. If it is still bleeding, hold it again for another 5-10 minutes.
- Once the bleeding stops, do not do anything that may make it start again, such as bending over or blowing your nose.

References

- FamilyDoctor.org. (2011). Nosebleeds. Retrieved from <http://familydoctor.org/familydoctor/en/diseases-conditions/nosebleeds.printerview.all.html>
- Med India Network for Health. (2013). Retrieved from http://www.medindia.net/patients/Firstaid_NoseBleed.htm

Image from <http://www.netplaces.com/first-aid/common-conditions/nosebleed.htm>

First Aid

Choking

Choking occurs when a foreign object is lodged in the throat or windpipe, blocking the flow of air. In adults, a piece of food is often the culprit. Young children often swallow small objects.

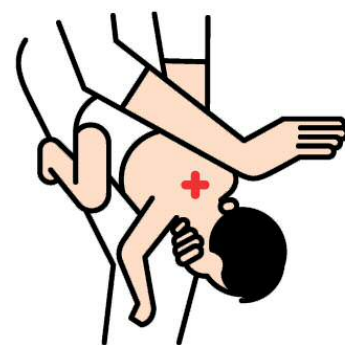


Perform Heimlich Maneuver (Abdominal Thrusts)

- Stand behind the person. Wrap your arms around the waist. Tip the person forward slightly.
- Make a fist with one hand. Position it slightly above the person's navel.
- Grasp the fist with the other hand. Press hard into the abdomen with a quick, upward thrust—as if trying to lift the person up.
- Perform a total of 5 abdominal thrusts, if needed. If the blockage still is not dislodged, repeat the five-and-five cycle.

For a choking infant younger than age 1, perform the following:

- Assume a seated position and hold the infant facedown on your forearm, which rests on your thigh.
- Thump the infant gently but firmly 5 times on the middle of the back using the heel of your hand. The combination of gravity and the back blows should release the blocking object.
- Hold the infant faceup on your forearm with the head lower than the trunk if the above does not work. Using two fingers placed at the center of the infant's breastbone, give 5 quick chest compressions.
- Repeat the back blows and chest thrusts if breathing does not resume. Call for emergency medical help.
- Begin infant CPR if one of these techniques opens the airway but the infant does not resume breathing.



Reference

Mayo Foundation for Medical Education and Research (MFMER). (2011). Choking: First Aid. Retrieved from <http://www.mayoclinic.com/print/first-aid-choking/FA00025/METHOD=print>.

Images from:

- http://www.health24.com/medical/Condition_centres/777-792-2557-2560,50041.asp
- <http://www.mommypage.com/2012/05/what-to-do-if-your-child-is-choking/>

First Aid

Insect Bites and Stings

Bites from mosquitoes, ants, and ticks cause mild reactions, while bites from bees and wasps may cause allergic reactions.

Signs and Symptoms

Allergic reactions may include:

- Mild nausea and intestinal cramps
- Diarrhea
- Swelling larger than 2 inches (5 centimeters) in diameter at the site

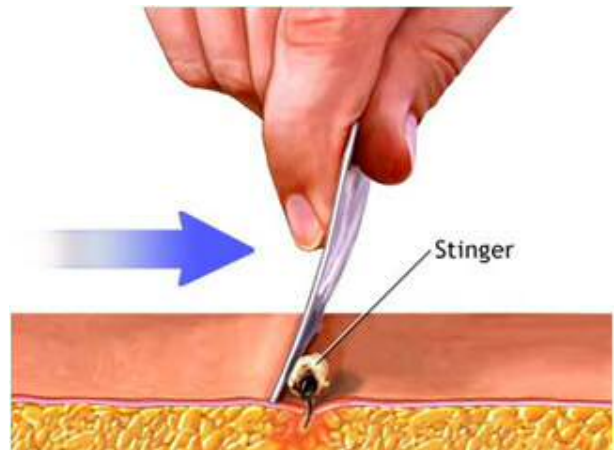
See your doctor promptly if you experience any of these signs and symptoms.

Treatment

- Move to a safe area to avoid more stings or bites. For bee stings, remove the stinger to prevent the release of more venom into the skin.
- Wash area with soap and water.
- Apply a cold pack or cloth filled with ice to reduce pain and swelling.
- Apply hydrocortisone cream (0.5% or 1%), calamine lotion, or a baking soda paste—with a ratio of 3 teaspoons (15 milliliters) baking soda to 1 teaspoon (5 milliliters) water—to the bite or sting several times a day until symptoms subside.
- Take an antihistamine containing diphenhydramine or chlorpheniramine maleate.

Reference

Mayo Foundation for Medical Education and Research (MFMER). (2011). Insect Bites and Stings: First Aid. Retrieved from <http://www.mayoclinic.com/print/first-aid-insect-bites/FA00046/METHOD=print>





First Aid

Snake Bite

Snake bite is an important medical emergency and cause of hospital admission. It may result in the death or chronic disability of many active younger people, especially those involved in farming and plantation work, if not given immediate treatment.

However, not all snake bites are fatal. A majority of snakes are not poisonous.

Poisonous Snakes

- Cobra
- Copperhead
- Coral snake
- Cottonmouth (water moccasin)
- Rattlesnake
- Various snakes found in zoos

Signs and Symptoms

Depend on the type of snake, but may include:

- Bleeding from wound
- Blurred vision
- Burning of the skin
- Convulsions
- Diarrhea
- Dizziness
- Excessive sweating
- Fainting
- Fang marks in the skin
- Fever
- Increased thirst
- Collapse (hypotension, shock)
- Nausea
- Vomiting
- Diarrhea



- Severe headache
- “Heaviness” of the eyelids
- Inappropriate drowsiness

Treatment

First aid treatment is carried out immediately or very soon after the bite before the patient reaches a dispensary or hospital.

- Reassure the victim who may be very anxious.
- Immobilize the whole of the patient’s body by laying him/her down in a comfortable and safe position. Make sure to immobilize the bitten limb with a splint or sling.
- Apply pressure if necessary.
- Avoid any interference with the bite wound (incisions, rubbing, vigorous cleaning, massage, application of herbs or chemicals) as this may introduce infection, increase absorption of the venom, and increase local bleeding.



- Bring the patient to the hospital.
- Antivenom is the only effective antidote for snake venom.

Don'ts

- Do not make the patient tired.
- Do not use tourniquet.
- Do not use ice pack on the bite marks.
- Do not puncture, pinch, or scrape bitten area.
- Do not suck in venom from the patient's open wound.
- Do not give medication not prescribed by the doctor.
- Do not elevate the wound at the same level or higher than the chest/heart area.

Reference

WHO, Guidelines for the management of snake bites.
University of Maryland Medical Center. (2010). Snakebite Symptoms. Retrieved from <http://www.umm.edu/ency/article/000031sym.htm>

Image from <http://yxhealth.com/fitness-equipment/first-aid-for-snake-bite/>

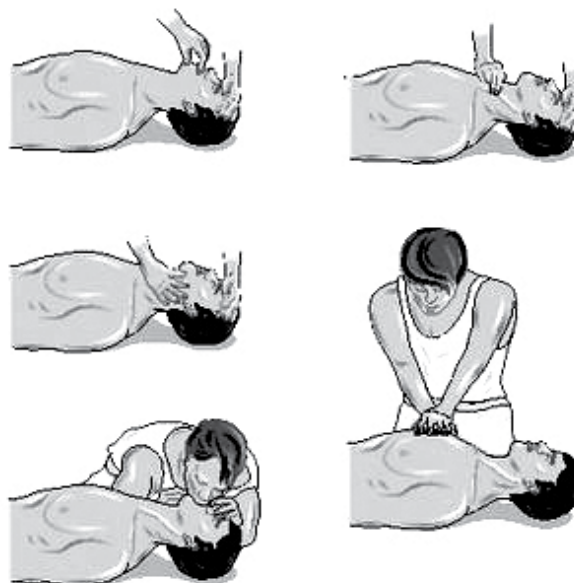
First Aid

Drowning

“Drowning is the process of experiencing respiratory impairment from submersion/ immersion in liquid.” The possible outcomes of drowning are classified as death, morbidity (the development of disability or injury), and no morbidity (WHO, 2002).

Steps to Revive a Drowning Victim

- If the victim vomits while you are resuscitating him, turn the person toward you, and clear out the mouth before turning him/her on to the back and resuming rescue breathing.
- If the victim vomits while in recovery position, clear out the mouth and keep a close eye on breathing to ensure that it has not stopped.
- If the victim is conscious and becomes sick, encourage him/her to lean forward and give support while he/she is vomiting.
- Do not make any effort to remove water from the lungs by applying chest compressions or abdominal thrusts.
- Ensure an open airway and that the person is breathing.
- Tilt the head, check the mouth, and lift the chin.
- Check for breathing for up to 10 seconds.
- If the victim is breathing, place him/her into the recovery position.
- If the victim is not breathing, provide rescue breathing before moving on to an assessment of circulation and full CPR (cardiopulmonary resuscitation) as necessary.



References

- FirstAid.ph. (2011). Drowning. Retrieved from <http://www.firstaid.ph/first-aid-procedures/drowning.html>
- MedicineNet.com. (2013). Retrieved from http://www.medicinenet.com/drowning/article.htm#what_is_drowning

Image from <http://www.surgeryencyclopedia.com/A-Ce/Cardiopulmonary-Resuscitation.html#b>

Cardiopulmonary Resuscitation (CPR)

Cardiopulmonary resuscitation (CPR) is a lifesaving technique useful in many emergencies, including heart attack or near drowning, in which someone's breathing or heartbeat has stopped.



General Procedure

- If the victim is still not breathing normally, coughing or moving, begin chest compressions.
- Place the heel of one hand on the breastbone right between the nipples and press down about 2 inches 30 times. Compressions should be fast at the rate of at least 100 per minute, faster than once per second.
- Tilt the head back and lift the chin to open the airway.
- Pinch nose and cover the mouth with yours and blow until you see the chest rise. Give 2 breaths. Each breath should take 1 second.
- Continue CPR (30 chest compressions followed by 2 breaths, then repeat) until the person recovers or help arrives.

Don'ts

- If the person has normal breathing, coughing, or movement, DO NOT begin

chest compressions. Doing so may cause the heart to stop beating.

- Unless you are a health professional, DO NOT check for a pulse. Only a health care professional is properly trained to check for a pulse.

CPR for Infants and Small Children

- Shake or tap the infant gently. If there is no response, call an ambulance.
- Carefully place the infant on its back and perform chest compressions
- Place 2 fingers on the breastbone, just below the nipples.
- Give 30 chest compressions by gently pressing down on the infant's chest about 1/3 to 1/2 the depth of the chest.
- Lift up the chin with one hand to open the airway. Do not tilt the head too far back.
- If the infant is not breathing, cover the infant's mouth and nose tightly with your mouth and give 2 breaths. Each breath should take about a second and make the chest rise.
- Continue CPR (30 chest compressions followed by 2 breaths, then repeat) for about 2 minutes.
- Repeat rescue breathing and chest compressions until the infant recovers or help arrives.

Reference

US National Library of Medicine. (2011). CPR-Adult. Retrieved from <http://www.nlm.nih.gov/medlineplus/ency/article/000013.htm>

Image from <http://blogs.redcross.org.uk/tag/cpr/>



Mental Retardation

Mental retardation is a condition of incomplete or halted development of the mind. It is characterized by the impairment of skills manifested during the developmental period that contributes to the overall level of intelligence.

Intellectual functioning is significantly below average (IQ<70), with accompanying impairment in the person's effectiveness in meeting the standards expected of one's age, as is expected by social and cultural influences in the following areas: communication; self-care; home living; social/interpersonal skills; use of community resources; self-direction; functional academic skills; work; leisure; and health and safety.



Mental retardation is classified by the degree of intellectual functioning as mild, moderate, severe, or profound. There are other physical defects associated with the mental retardation.

Causes

- Genetic (chromosomal and inherited) conditions
- Prenatal exposure to infections and toxins
- Perinatal trauma

- Birth asphyxia
- Acquired conditions and social factors

Signs

- Sitting up, crawling, or walking later than other children
- Learning to talk later or have trouble speaking
- Finding it hard to remember things
- Not understanding how to pay for things
- Trouble understanding social rules
- Trouble seeing the consequences of their actions
- Trouble solving problems
- Trouble thinking logically

Prevention and Control

- In general, people with mild and moderate mental retardation have the most flexibility to adapt to environmental conditions.
- In most cases, the underlying intellectual impairment does not improve, yet the affected person's level of adaptation can be positively influenced by an enriched and supportive environment.

Reference

- DOH Philippines. (2005). Health Advisory on Mental Retardation.
- National Dissemination Center for Children with Disabilities. (2011). Retrieved from <http://nichcy.org/disability/specific/intellectual>
- World Health Organization. (2011). Mental Retardation. Retrieved from http://www.searo.who.int/en/Section1174/Section1199/Section1567/Section1825_8084.htm

Image from <http://medicine-science.com/mental-retardation/>

Handwashing

Hand washing is the single most important behavior that can help prevent spread of infection. Clean hands save lives!

Proper Handwashing Technique

Note: Make sure that your hands are free from wristwatch, ring, and bracelets.

Step 1.

Wet hands and wrists. Apply soap or alcohol-based hand rub.



Step 2.

Right palm should be over left, then left over right.



Step 3.

Wash hands palm-to-palm with fingers interlaced.



Step 4.

Rub back of the fingers to the opposing fingers and interlock them.



Step 5.

Do rotational rubbing of the right thumb by clasping it in the left palm, and vice versa.



Step 6.

Do rotational rubbing backward and forward with tops of fingers and thumb of right hand in left, and vice versa.



Points to Remember in Handwashing

- Wash hands for a minimum of 15-20 seconds (sing happy birthday song twice).
- Use soap and clean (flowing) water.
- Make sure you have washed all areas properly following the 6 steps.
- Dry hands thoroughly.
- Vigorously rub hands using the same steps.

Reference

DOH Philippines. (2007). Health Advisory on Personal Hygiene. Retrieved from: <http://chd1.doh.gov.ph/index.php/health-advisories/key-health-messages-for-emergencies/141>

Images from National Center for Disease Prevention and Control, DOH. (2005). Proper Handwashing Procedure Poster.

Cough Manners

Cover your cough. Stop the spread of germs that can make you and others sick!

Influenza (flu) and other serious respiratory illnesses, like respiratory syncytial virus (RSV), whooping cough, and severe acute respiratory syndrome (SARS), are spread through cough, sneezing, or unclean hands.

To help stop the spread of germs:

- Cover nose and mouth with tissue or handkerchief every time you sneeze, cough, or blow your nose.
- Throw away used tissue in the garbage can.

- If you do not have a tissue, cough or sneeze into your upper sleeve or elbow, not your hands.
- Do not spit on the floor or any pavement.
- You may be asked to put on a facemask to protect others.
- Wash your hands often with soap and clean water for 20 seconds.
- If soap and water are not available, use an alcohol-based hand rub.

Reference

Centers for Disease Control and Prevention. (2013). Cover Your Cough. Retrieved from <http://www.cdc.gov/flu/protect/covercough.htm>

Übokabülyo Poster. (2008). Produced by the College of Development Communication, University of the Philippines Los Baños with assistance from USAID and DOH.

ÜBOKABÜLYO

GUIDE TO COUGH MANNERS



Food Safety



Food safety is the assurance/guarantee that food will not cause harm to consumers when it is prepared and/or eaten according to its intended use.

Food and Water-borne Diseases

These constitute a group of illnesses caused by any infectious (bacteria, viruses, and parasites) and non-infectious agents (chemical, animal and plant toxins)

Common Causes of Food and Water-borne Diseases

- Unsafe sources of drinking water
- Improper disposal of human waste
- Unhygienic practices, like spitting anywhere, blowing or picking the nose
- Unsafe food handling and preparation practices (i.e., street-vended food)

Five Keys to Safer Food (WHO, 2011)

1. **Keep clean.**

- Wash your hands before handling food and often during food preparation.
- Wash your hands after going to the toilet.
- Wash and sanitize all surfaces and equipment used for food preparation.
- Protect kitchen areas and food from insects, pests, and other animals.

2. **Separate raw from cooked food.**

- Separate raw meat, poultry, and seafood from other foods.
- Use separate equipment and utensils, such as knives and cutting boards, for handling raw food.
- Store food in containers to avoid contact between raw and prepared food.

3. **Cook food thoroughly.**

- Cook food thoroughly, especially meat, poultry, eggs, and seafood.
- Bring food, like soups and stews, to boiling to make sure that they have reached 70°C. For meat and poultry, make sure that juices are clear, not pink. Ideally, use a thermometer.
- Reheat cooked food thoroughly.

4. **Keep food at safe temperatures.**

- Do not leave cooked food at room temperature for more than 2 hours.



- Refrigerate promptly all cooked and perishable food (preferably below 5°C).
- Keep cooked food piping hot (more than 60°C) prior to serving.
- Do not store food too long even in the refrigerator.
- Do not thaw frozen food at room temperature.

5. ***Use safe water and raw materials.***

- Use safe water or treat it to make it safe.
- Select fresh and wholesome food.
- Choose food processed for safety, such as pasteurized milk.
- Wash fruits and vegetables, especially if eaten raw.
- Do not use food beyond its expiry date.

What to Do in Case of Suspected Food-borne Illnesses

- Preserve the evidence. If a portion of the suspected food is available, wrap it securely with a “danger” label and freeze it.
- Seek treatment as necessary. If symptoms persist or are severe (i.e., bloody diarrhea, excessive nausea and vomiting, or high temperature), immediately consult a doctor.
- Report the incidence to the local health department.

References

- Centers for Disease Control and Prevention. (2011) Food Safety. Retrieved from <http://www.cdc.gov/foodsafety/>
- DOH Philippines. (2005). Health Advisory on Food Safety.
- World Health Organization. (2011). Food Safety. Retrieved from www.who.int/fsf/

Image from <http://www.fao.org/docrep/008/a0104e/a0104e08.htm>

Food Safety

Botcha (Double Dead Meat)

Botcha or “double dead” meat is livestock or poultry that have died due to disease, slaughtered, and then sold as fresh meat to consumers.

Effects of Eating Botcha

- Hazardous to health
- May result in diarrhea and food poisoning

How to Avoid Buying Botcha

Look for the following signs:

- Pale in color with bluish or greenish-gray tint;
- Sticky consistency;
- Foul smell;
- Cold (meat has been frozen);
- Hair and skin not properly cleaned (Botcha is often butchered in a hurry before the meat hardens.); and
- Lower price compared with fresh meat.

References

- National Meat Inspection Services. (2011). Yes to Safe Meat
- “QC officials step up drive vs ‘hot meat’”. Local Government of Quezon City. (2008)

Image from http://article.wn.com/view/2010/09/21/1200_kilos_of_doubleddead_meat_seized_in_market_raid/





Food Safety

Paralytic Shellfish Poisoning (Red Tide)

Red tide poisoning is a life-threatening syndrome associated with eating contaminated shellfish.

Cause

Red tide microorganisms in shellfish (*tahong*, *talaba*, *halaan*)

Signs and Symptoms

The symptoms are purely neurological and the onset is rapid that it can be felt within 12 hours.

Neurological

- Sense of numbness around the mouth or the face
- Dizziness
- Pricking sensation and/or paralysis of hands and feet
- Body weakness
- Rapid pulse beat
- Difficulty in talking, swallowing, breathing
- Headache

Gastrointestinal

- Abdominal pain, vomiting, and diarrhea

Treatment

- Supportive treatment, especially ventilatory support/artificial respiration, is given in severe cases.
- Fluid therapy may be administered.



- Detoxification (e.g., coconut water and brown sugar) may be done.

Prevention

When there is a red tide warning:

- Do not eat shellfish.
- Avoid eating *alamang* and small fishes.
- Wash thoroughly and remove gills and intestines of fish, squids, and crabs.
- Remove heads of shrimps.

Reference

DOH Philippines. (2005). Health Advisory on Paralytic Shellfish Poisoning (Red Tide).

Image from <http://topnews.net.nz/content/29184-health-warning-all-shellfish-tairua-whakatane>

Watusi Poisoning

It is a condition due to ingestion of watusi, which is made up of extremely poisonous and toxic chemicals.

Signs and Symptoms

- Burns
- Burning pain in the throat and garlic odor from breath
- Nausea, vomiting, diarrhea, abdominal pain
- Shock
- Severe pain on contact
- Perforation of the gastrointestinal tract

Immediate Treatment

- If ingested, DO NOT induce vomiting.
- Children may be given 6-8 raw egg whites and adults, 8-12 raw egg whites.
- Bring the child immediately to the nearest hospital.
- If there is dermal exposure, bathe the patient using alkaline soap, like Perla.

Prevention

Keep watusi out of children's reach.

Reference

DOH Philippines. (2005). Health Advisory on Watusi Poisoning

Image from <http://images.mylot.com/userImages/images/postphotos/2615755.jpg>





Piccolo Poisoning

Piccolo is a small firecracker that comes in attractive packaging with a cartoon character. Due to its size and packaging, children could easily mistake it for candy.

Piccolo is very poisonous because it contains the substance yellow phosphorus. The estimated human lethal dose is 50-100 milligrams.

Signs and Symptoms

- Burns
- Vomiting

Immediate Treatment

- **If swallowed:** DO NOT induce vomiting. Children may be given 6-8 raw egg whites and adults, 8-12 raw egg whites. Bring the child immediately to the nearest hospital.
- **If caught in the eye:** Immediately wash with water for at least 15 minutes. Keep eyelids open. Seek immediate medical assistance.
- **If skin is affected:** Immediately wash affected areas with plenty of water. Remove contaminated clothing (make sure it is washed before re-used). Seek medical attention.
- **If inhaled:** Let patient breathe in fresh air; keep him/her comfortable and warm. Seek urgent medical assistance.



Reference

Luntian Corner. (2010). Why Piccolo Firecracker is Dangerous? Lethal Dose and First Aid. Retrieved from: <http://www.luntiancorner.com/health/piccolo-treatment/>

Image from <http://www.magnustoday.net/2010/12/why-is-the-piccolo-firecracker-banned-by-doh/>

Boils

Boil is a pus-filled, painful infection of the skin, which is usually 1-5 centimeters in size. It usually starts as an infection in a hair follicle and spreads into the surrounding area. It is more common among kids with diabetes, malnutrition, or other conditions that weaken their immune system.



Causes

Staphylococcus bacteria through direct skin contact with infected persons or surfaces (Bacteria called *Staphylococcus aureus* are the usual cause.)

Signs

- Begins with swelling or redness of the skin
- Center of infection liquefies as pus collects

Treatment

- Do not touch the boil with dirty or bare hands.
- Never squeeze a boil, as this could well spread the infection.
- Apply warm compress to relieve pain.
- Cover the boil temporarily if it is in danger of getting dirty.

- Some boils may need to be opened and drained, and may need antibiotics.
- Consult a physician if the boil does not drain itself.

Prevention

- Wash hands frequently and thoroughly with soap and water.
- Take a bath at least once a day.

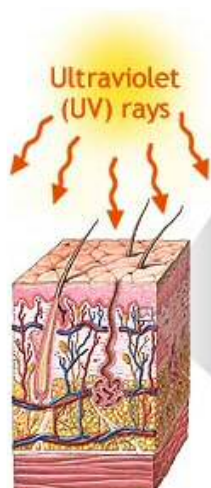
Reference

DOH Philippines. (2005). Health Advisory on Watusi Poisoning

Image from www.visualphotos.com



Sunburn



Sunburn occurs when skin is burned by exposure to the sun or other ultraviolet light.

Cause

Amount of exposure to the sun or other ultraviolet light source exceeds the ability of the body's protective pigment, melanin, to protect the skin

Signs

- Skin starting to become painful and red (The pain is worst between 6 and 48 hours after sun exposure.)
- Blistering of the skin in severe sunburns
- Swelling (edema) of the skin, especially in the legs
- May or may not have fever



Skin peeling usually begins between 3 and 8 days after exposure.

Treatment

- Take a cool shower or bath or place wet, cold wash rags on the burn.
- Avoid products that contain enzocaine, lidocaine, or petroleum (like petroleum jelly).

- If blisters are present, dry bandages may help prevent infection.
- Ibuprofen may help alleviate the pain from sunburn.
- If the skin is not blistering, apply moisturizing cream to relieve discomfort.
- Seek medical help if there is fever. (Aspirin should be avoided in children who are running a fever.)

Prevention

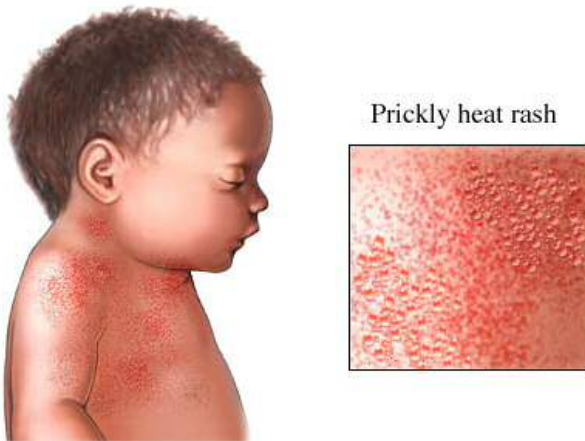
- Wear hat and other protective clothing, as well as ultraviolet-protected sunglasses to prevent sunburn.
- Apply sunscreen with SPF level of 30 or greater on exposed skin.

Reference

DOH Philippines. (2005). Health Advisory on Sunburn.

Image from <http://www.healthcentral.com/allergy/h/allergic-to-sunburn.html>

Prickly Heat



Prickly heat is a type of heat rash characterized by tiny bumps or even water blisters. It commonly occurs on the forehead (under caps or visors), body folds, upper back and chest, and arms. Prickly heat is most common when it is hot and humid.

Cause

Clogging of sweat glands, resulting in tiny bumps

Signs

- “Prickly” sensation
- Rash that can look quite similar to one caused by infected hair follicles (folliculitis) (There are no hair follicles in prickly heat bumps.)

Treatment

- Cleanse the skin gently.
- Apply corn starch or baking soda powder.
- If there is excessive itching or if the rash is infected, consult a physician.

Prevention

- Take a bath every day.
- Limit exposure to the sun.
- Always dry up sweat from the skin.
- Wear light, loose clothing.

Reference

DOH Philippines. (2005). Health Advisory on Prickly Heat

Image from <http://www.emedicinehealth.com/script/main/art.asp?articlekey=135659&ref=139114>

Toy Safety

Characteristics of a Good Toy

- Suitable to the child's physical capabilities, mental and social development
- Appealing and interesting to the child
- Well-constructed, durable, and safe for the child's age



Dos and Don'ts in Toy Safety

1. Check labels on the packaging and observe precautions appearing in the labels.
2. Ensure that the child will play with a toy suited for his/her age under adult supervision.
3. Dispose plastic packaging accordingly. Keep it out of reach of children.

4. For children under age 3, do not buy the following:

- Balls with a diameter of 1.75 inches or less so as to prevent choking;
- Toys that easily break into small parts or pieces (glass or brittle plastics);
- Toys containing small detachable parts or pieces, which could become lodged in the throat;
- Toys with sharp points and edges;
- Toys with electrical parts, unless supervised by an adult;
- Toys with parts that could pinch or entrap fingers, toes, or hair; and
- Toys with parts put together by straight pins, sharp wires, or nails that are exposed and easily detached.

Reference

Department of Health. (2011) Toy Safety Tips Advisory. Retrieved from http://www.doh.gov.ph/advisory/toy_safety.html

Image from <http://www.indianwomenshealth.com/Tips-for-Toy-Safety-261.aspx>

SECTION D
PHILIPPINE HEALTH ADVISORIES

Environmental Health

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Climate Change

Cholera



Climate Change

Climate change is “change in climate which is attributed directly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (United Nations Framework Convention on Climate Change, 1992)

Climate change affects the most fundamental determinants of health: air; food; water; shelter; and freedom from diseases.

Climate change increases the number of disasters, such as floods and drought, resulting in an increased number of diseases, such as DENGUE, LEPTOSPIROSIS, CHOLERA, MALARIA, and TYPHOID FEVER.

Ways to Prevent Cholera

- Drink only safe and clean water. If unsure, boil drinking water; upon reaching boiling point, extend boiling for 2 or

more minutes. You may also do water disinfection.

- Keep food away from insects and rats by covering it.
- Wash and cook food properly.
- Dispose of human waste properly.
- Use toilet properly and clean toilet every day. Wash hands with soap and water after using toilet, before eating, and before preparing food.
- Keep surroundings clean to prevent flies and other insects and rodents from breeding.

For more information, see advisory on *Cholera* (page 8).

Reference

DOH Philippines, MDG Achievement Fund, Adaptayo. (2011). “Cholera dulot ng Climate Change” health advisory.

Image from <http://www.corbis.com>



Climate Change **Dengue**

Climate Change

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Ways to Prevent Dengue

- Cover water drums and water pails at all times to prevent mosquitoes from breeding.
- Replace water in flower vases once a week.
- Clean all water containers once a week. Scrub the sides well to remove eggs of mosquitoes sticking to the sides.
- Clean gutters of leaves and debris so that rain water will not collect as breeding places of mosquitoes.



- Puncture or cut old tires used as roof support to avoid accumulation of water.
- Collect and dispose all unusable tin cans, jars, bottles, and other items that can collect and hold water.

For more information, see advisory on *Dengue* (page 9).

Reference

DOH Philippines, MDG Achievement Fund, Adaptayo. (2011). “Dengue dulot ng Climate Change” health advisory.

Image from <http://business.inquirer.net/57345/danger-of-dengue-now-more-serious>



Climate Change

Leptospirosis



Climate Change

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Ways to Prevent Leptospirosis

- Avoid swimming or wading in potentially contaminated water or flood water.
- Use proper protection, like boots and gloves, when work requires exposure to contaminated water.
- Drain potentially contaminated water when possible.
- Control rats in the household by using rat traps or rat poison and maintaining cleanliness in the house.

For more information, see advisory on *Leptospirosis* (page 23).

Reference

DOH Philippines, MDG Achievement Fund, Adaptayo. (2011). “Leptospirosis dulot ng Climate Change” health advisory.

Image from http://news.bbc.co.uk/2/hi/in_pictures/8278847.stm



Climate Change **Malaria**



Climate Change

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Climate change affects the most fundamental determinants of health: air; food; water; shelter; and freedom from diseases.

Climate change increases the number of disasters, such as floods and drought, resulting in an increased number of diseases, such as DENGUE, LEPTOSPIROSIS, CHOLERA, MALARIA, and TYPHOID FEVER.

Ways to Prevent Malaria

- Use mosquito nets. It is more effective if the mosquito net is treated with insecticide.
- Wear long sleeves and pants.
- Use repellants/coils and screens on doors and windows.
- Clear hanging branches of trees along the streams.
- Have your blood examined if you have the signs and symptoms of malaria.
- Follow the advice of health workers on how to take anti-malaria drugs.

For more information, see advisory on *Malaria* (page 25).

Reference

DOH Philippines, MDG Achievement Fund, Adaptayo. (2011). “Malaria dulot ng Climate Change” health advisory.

Image from <http://www.news.com.au/world/dutch-aid-worker-murdered/story-fndir2ev-1226416258097>

Climate Change

Typhoid Fever

Climate Change

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Climate change affects the most fundamental determinants of health: air; food; water; shelter; and freedom from diseases.

Climate change increases the number of disasters, such as floods and drought, resulting in an increased number of diseases, such as DENGUE, LEPTOSPIROSIS, CHOLERA, MALARIA, and TYPHOID FEVER.

Ways to Prevent Typhoid Fever

- Get vaccinated to help prevent typhoid fever and its complications.
- Drink only safe and clean water. If unsure, boil drinking water; upon reaching boiling point, extend boiling for 2 or more minutes. You may also do water disinfection
- Wash and cook food properly.

For more information, see advisory on *Typhoid Fever* (page 38).



Reference

DOH Philippines, MDG Achievement Fund, Adaptayo. (2011). “Typhoid fever dulot ng Climate Change” health advisory.

Image from <http://www.reuters.com/article/2009/07/22/us-typhoid-vaccine-idUSTRE56L6M920090722>



Water Sanitation

Millions of people still get drinking water from unsafe sources. Unsafe water can cause illnesses and death from diseases. Hence, it is important to practice water sanitation and hygiene (WASH).

You can help improve and protect the quality of your drinking water through simple, inexpensive steps to treat and safely store water in your homes.



- *Disinfection by Boiling*
Boil water for 10-12 minutes. Two minutes or longer at 100°C will kill most disease-causing germs including cholera.
- *Chemical Disinfection*
Chlorination is the most widely used method for disinfecting drinking water. The source of chlorine can be sodium hypochlorite (such as household bleach) or calcium with available chlorine hypochlorite (chlorine granules).

Your local water supplier (water district) may be using this method to provide you clean and safe drinking water through your faucets.

Remember: Always store water in clean and covered storage containers to avoid contamination with pathogens or microorganisms that cause diseases.

References

- DOH Philippines. (2005). Health Advisory on Water Sanitation.
- Global Water, Sanitation, and Hygiene (WASH), Centers for Disease Control and Prevention, USA, 2011
- Household water treatment and safe storage, World Health Organization, 2011

Image from http://wciv.images.worldnow.com/images/19904934_BG1.jpg

Your Health during Summertime

March to May is vacation time and fiesta season in the country. To avoid food poisoning, diarrhea, heat-associated ailments, and recreation-associated injuries, the public is advised to take the following precautions.

Food and Drinks

- Cook food properly. Preferably, food must be eaten immediately after cooking (while still hot).
- Refrigerate and reheat leftover food before eating.
- Wash hands before and after preparing food.
- Avoid preparing food for others when you are sick.
- Avoid drinking water and iced beverages of doubtful quality.
- If water quality is doubtful, boil drinking water for at least 2 minutes.
- Peel and wash fruits/vegetables before eating. Wash hands before and after eating.

At the Beach

- Do not allow children to swim without the company of an adult who can swim and is not drunk.
- Avoid staying under the sun with scanty clothes for more than 3 hours as this predisposes you to sunburn, heat exhaustion, and worst, heat stroke.
- Should you want a tan, drink plenty of fluids to avoid dehydration.



While on the Road

- Check your vehicle very well before going on a trip.
- Bring a repair kit with you.
- When drunk, never attempt to drive.

Reference

DOH Philippines. (2005). Health Advisory titled "It's Summertime!"

Image from <http://www.newsflash.org/2004/02/ht/ht009822.htm>



Your Health during Haze



Haze due to forest fire can cause air pollution, which can bring about increased risks for respiratory tract infections and cardiac ailments.

Ways to Cope with Haze

The elderly, children, and those with respiratory (asthma, COPD) and cardiovascular diseases should do the following:

- Stay indoors with good ventilation.
- Wear appropriate dust masks when going outside the house.
- Refrain from physical activities (exercise, etc.) in heavily polluted areas.
- Exercise extreme caution when on the road to prevent accidents.
- Use headlights/fog lights.
- Follow the required minimum speed level and extreme caution in low visibility driving.
- Ensure that vehicle is in good running condition.

- Stay away from low-lying areas where smoke and suspended particles may settle.
- Tune in to the radio or television for more health advisories.

Consult a doctor if there is:

- Difficulty in breathing
- Cough
- Chest pain
- Increased tearing of the eyes
- Nose or throat irritation

Reference

DOH Philippines. (2005). Health Advisory on Haze

Image from <http://reachthetribes.com/200909/sept09.htm>

Your Health during Typhoons



Typhoons and heavy rains may cause flooding which, in turn, can potentially increase the transmission of communicable diseases. These include: water-borne diseases (e.g., typhoid fever, cholera, leptospirosis, and hepatitis A); and vector-borne diseases (e.g., malaria, dengue). Climate change affects the increase in the intensity of typhoons.

Water

- Make sure drinking water is from a safe source.
- When in doubt, boil water for 2 minutes or longer, or chlorinate drinking water to make it safe.

Food

- Food should be well-cooked.
- Leftovers should be covered and kept away from household pests.
- Food waste should be disposed properly.

Clothing

Keep yourself dry and warm.

Others

- Consult a doctor at once if you, or any household member, have any sign or symptom of infection. This will help prevent the spread of infection in the evacuation area.
- Common infections or diseases that may spread in an evacuation area include: coughs and colds; acute gastroenteritis; skin and eye infections; measles; dengue; leptospirosis; and hepatitis A.
- Do not allow children to wade in floodwaters to avoid diseases, such as leptospirosis.
- Dispose all waste properly.
- Maintain personal hygiene. Always wash your hands before and after eating and using the toilet.
- Put safety first. Stay away from hanging wires and unstable structures.

Reference

DOH Philippines. (2005). Health Advisory during Typhoon.

Image from <http://www.infiniteunknown.net/2009/10/02/philippines-state-of-calamity-tens-of-thousands-flee-new-typhoon/>



Your Health during the El Niño Phenomenon

El Niño is a weather phenomenon characterized by extreme climatic conditions—either extreme temperature rise with a little rainfall or unusually heavy rainfall. El Niño is associated with increased risks due to some diseases. Climate change affects the increase in frequency of El Niño occurrence.

Health Effects

- Diseases related to water scarcity or shortage, such as diarrhea and skin diseases
- Red tide blooms: paralytic shellfish poisoning
- Disorders associated with high temperatures, such as heat cramps, heat exhaustion, exertional heat injury, and heat stroke

Ways to Cope with El Niño

- Conserve water and use it wisely.
- Protect water sources from contamination.
- Drink more fluids.
- Listen to the updates on shellfish ban.
- Wear light clothing.
- Avoid strenuous physical activity.

Reference

DOH Philippines. (2005). Health Advisory on El Niño Phenomenon.

Image from <http://www.asianews.it/news-en/As-El-Ni%C3%B1o-causes-droughts-and-power-cuts,-people-turn-to-shamans-and-prayers-17712.html>



Your Health during the La Niña Phenomenon

La Niña is a weather phenomenon characterized by unusually cold ocean temperature in the Equatorial Pacific, which causes increased numbers of tropical storms in the Pacific Ocean. La Niña is associated with increased risks due to some diseases. Climate change affects the increase in frequency of La Niña occurrence.

Health Effects

- Disease related to contaminated water due to flooding, such as acute gastroenteritis, typhoid fever, cholera, and hepatitis A
- Disease related to wading in flood waters contaminated with urine of infected animals, such as leptospirosis
- Disease transmitted by mosquitoes, such as dengue and malaria
- Accidents and injuries, such as contusions, lacerations, fractures, electrocution

Ways to Cope with La Niña

- Boil your drinking water; upon reaching boiling point, extend boiling for 2 or more minutes. You may also do water chlorination.
- Wash hands before and after preparing food, and after using the toilet.
- Avoid wading in floodwaters. If you must, wear rubber boots. Clean up all possible mosquito breeding sites, such as vases, empty coconut shells, old tires, and tin



cans.

What to Do in Case of Floods

- Stay inside a house or building during heavy rains. Avoid wading and taking baths in floodwaters.
- If you live in low-lying areas, seek higher grounds when a flood advisory is issued.
- Avoid crossing low-lying areas and bridges during evacuation.

Reference

DOH Philippines. (2005). Health Advisory on La Niña.

Image from <http://newsinfo.inquirer.net/breakingnews/nation/view/20100522-271454/After-El-Nio-comes-La-Nia>



Your Health during the Holiday Season

'Tis the season to be jolly, but these happy times also bring risks to your health. You must be conscious of any potential holiday health hazard, such as indigestion, allergies, high blood pressure, injuries due to accidents, and alcohol-related problems.

13 Ways to be Healthy during the Holidays

1. **Prepare early for the season to avoid stress.** Over fatigue and stress due to rushing and preparing for the holidays may cause complications, such as heart diseases and hypertension.
2. **Give safe and age-appropriate toys to children.** Choose toys without small and sharp parts, which may cause choking and injury. Read and follow instructions carefully.
3. **Buy registered products to ensure safety.** Make sure your holiday lights, lanterns, and other decorations are made by legal/registered manufacturers.
4. **Prepare well-balanced holiday meals.** Make sure that vegetable and fruits are on the table, together with your traditional holiday food, such as ham, *lechon*, *queso de bola*, and sweets.
5. **Ensure cleanliness and freshness of the foods you prepare to avoid food poisoning.**
6. **Eat just the right amount of food at parties and gatherings.** Be kind to your heart. Eat moderate amounts of nutritious foods to sustain your daily activities. Avoid salty and fatty foods. These foods may cause heart conditions and other diseases.
7. **Drink plenty of liquids, such as water and fruit juices, to facilitate excretion.**
8. **Avoid too much alcohol.** Do not drink and drive. Too much alcohol can cause serious damage to the liver and heart or may induce stroke. Drunk driving results in vehicular accidents.
9. **Walk, run, dance, and exercise regularly to stay active during the holidays.**
10. **Get enough sleep so that the mind and body can rest.**
11. **Avoid crowded areas where bacteria that cause diseases multiply and spread easily.** Airy and well-ventilated areas are essential to healthy living.
12. **Take care of yourself and your family against changes in temperature.** Children and adults may become susceptible to cough, colds, and fever. If your cough, colds, and fever are more than 5 days, consult your nearest health station.
13. **Avoid injuries/accidents from the use of firecrackers.**
 - a. Use of firecrackers is dangerous.
 - b. All firecrackers are hazardous to children.
 - c. Avoid people who are using firecrackers.
 - d. Do not pick up and use busted firecrackers.
 - e. Go to the nearest hospital in case of accidents.

References

- DOH Philippines. (n.d.). Health Advisory titled "Healthy Holiday Season."
- DOH Philippines. (2005). Health Advisory titled "Health for the Holiday Season."

Environmental Health: Public Health Emergencies

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Ash Fall



Volcanic ash consists of powder-size to sand-size particles that have been blown into the air by an erupting volcano. Exposure to falling ash may cause a number of health problems. Anyone who already suffers from problems, such as bronchitis, emphysema, or asthma, should avoid exposure to volcanic ash.

Health Effects

- Nose and throat irritation
- Coughing
- Bronchitis-like illness
- Discomfort while breathing
- Eye irritation
- Minor skin problems
- Injuries/death due to roof collapse or vehicular accident resulting from slippery roads and poor visibility

Ways to Cope with Ash Fall

- Minimize exposure to ash.
- Stay indoors as much as possible.
- Keep doors and windows closed.

- Keep home from infiltration by using damp curtains, blankets, or clothing.
- Use dust masks.
- Wear goggles or eyeglasses to protect eyes from irritation.
- Keep pets in closed shelters.
- Dampen ash in your yard to prevent it from billowing up into the air.
- Clear your roof of ash.
- Observe traffic notifications and road safety measures.

References

- Health Emergency Management Staff. (2006) DOH-CHD-Bicol
- Geology.com (2005). Volcanic Ash. Retrieved from <http://geology.com/articles/volcanic-ash.shtml>

Image from <http://www.allvoices.com/news/8253815-ash-from-mt-bulusan-falls-on-neighboring-masbate-province>



Dead Bodies after Disasters



Mass graves should never be used for burying disaster victims. Under no circumstances should mass cremation of bodies take place when this goes against the cultural and religious practices of the affected population. It is necessary to exhaust every effort to identify the bodies, and, as a last resort, bury unidentified corpses in individual niches or graves. This is a basic human right of surviving family members.

The public should not fear that dead bodies may cause diseases. Here's the truth:

1. Dead bodies do not cause epidemics in cases of disasters or calamities (e.g., earthquakes, fire). The victims did not die of contagious/infectious diseases.
2. Infectious microorganisms present in dead bodies are not viable after 48 hours.
3. Gloves, masks, and goggles must be used when handling dead bodies.
4. Dead bodies must be placed in refrigerated vans or dry ice to avoid rapid

decay. The following should not be used to preserve dead bodies: lime (calcium-containing minerals); muriatic acid; or potassium alum (*tawas*). These will affect identification.

5. If decay of dead bodies cannot be prevented, they can be wrapped individually in cadaver bags and buried shallow.
6. Nothing that would help in identification, including clothing, must be removed from the cadaver's body.

Reference

Pan American Health Organization and World Health Organization. (2004). Management of Dead Bodies in Disaster Situations. Retrieved from <http://helid.digicollection.org/pdf/s8243e/s8243e.pdf>

Image from <http://www.thesingleparenttalks.com/2009/09/philippines-flood.html>



Earthquake

Earthquake is the shaking of the earth caused by waves moving on and below the earth's surface and causing surface faulting, tremors, vibration, liquefaction, landslides, aftershocks, and/or tsunamis.

Earthquakes strike suddenly without warning. Planning and identifying potential hazards are key to effectively reduce the dangers of serious injury or loss of life from an earthquake.

The following should be done before, during, and after an earthquake:

Before an Earthquake

- Develop an emergency plan.
- Familiarize yourself with your place of work or residence.
- Take note of hotlines and emergency numbers to call for help.
- Prepare an emergency supply kit consisting of food, water, clothing, first aid supplies, mobile phone, whistle, flash light, and extra batteries.
- Secure heavy furniture and objects, which may break loose and fall during earthquakes.

During an Earthquake

- Do not panic, remain calm.
- If inside a building:
 - Do not jump from the building.
 - Go to the nearest exit and leave the building as soon as possible.
 - If the building is structurally sturdy, stay inside and brace yourself in a doorway

or stay beside or underneath sturdy furniture to protect yourself from falling objects.

- If outdoors:
 - Move to an open area away from nearby buildings, bridges, posts, power lines, and other structures that may fall or collapse.
 - If driving, pull over to the side of the road .
 - Stay as low as possible inside the vehicle.

After an Earthquake

- Stay calm.
- Check yourself for any injuries.
- Check for injured or trapped people near the affected area.
- Seek medical help if you or others are injured.
- Check for fire, toxic chemical spills, and other hazards in your surroundings.
- Check water and electric lines for defects or damage.
- Listen to the radio or watch local TV for additional information and safety instructions.
- Inspect gas, water, and electric lines for any damage and leak. If in doubt, shut off main switches.
- Evacuate immediately if you smell or hear gas and you are not able to shut it off.
- Stay away from damaged buildings.

References

PHIVOLCS. (2006). Earthquake!



Landslide



Landslides happen when there are unstable slopes during or after heavy rains or droughts, earthquakes, or volcanic eruptions. Mountainous and sloping areas are more likely to experience landslides.

Ways to Cope with Landslides

- Find out whether or not landslides have occurred previously in your area by contacting local authorities.
 - Listen to the radio, watch TV, or use the Internet for weather updates.
 - Contact local authorities about emergency and evacuation plans.
 - If you live in an area vulnerable to landslides, consider evacuating soon.
 - Be wary of holes or bare spots on hillsides. Tilted trees or fences/riprap may also indicate unstable slope.
 - Listen for rumbling sounds. This is a sign of an approaching landslide.
 - Be alert when driving along sloping areas. Roads may become blocked or closed due to collapsed pavement or debris.
- Get away from any debris flow. Move to the nearest high ground or run for the nearest shelter and take cover (if possible, under a desk, table, or other piece of sturdy furniture).
 - Stay away from the area where a landslide has just occurred. Flooding or additional slides may occur after.
 - Check for injured or trapped people near the affected area.
 - Listen to the radio or TV for emergency information.

Call for HELP:

- National Disaster and Risk Reduction and Management Council (NDRRMC) hotlines: (02) 911-1406, (02) 912-2665, (02) 912-5668
- Philippine National Police (PNP) Hotline Patrol: call 117 or send TXT PNP to 2920

References

Centers for Disease Control and Prevention. (2010). Landslides and Mudslides. Retrieved from <http://www.bt.cdc.gov/disasters/landslides.asp>

Image from <http://earthdata.nasa.gov/featured-stories/featured-research/connecting-rainfall-and-landslides>

Oil Spill

Oil spills happen when oil tankers accidentally leak oil into the ocean. Oil contains volatile compounds that may have negative impacts on health. The following should stay away from oiled areas: people who have weak immune systems; the young, pregnant, or elderly; and those who have respiratory conditions.

Health Effects

- Prolonged contact may cause skin reddening, edema, and burning.
- Effects on skin may worsen by subsequent exposure to UV rays from the sun.
- Repeated exposure may cause upper respiratory tract conditions.
- Nasal irritation and feelings of nausea may be experienced.
- Acute inhalation may lead to euphoria, vertigo, headache, and chest pain.

Ways to Cope with Oil Spill

- Stay away from the area when you see or smell oil on the beach.
- Stay indoors in an air-conditioned area and avoid strenuous outdoor activity.
- Do not swim in areas affected by the oil spill.
- Avoid contact with sediment, sand, soil, or outdoor/indoor surfaces with visible oil contamination.
- Do not use oil-contaminated water for human or animal consumption.
- Do not fish in oil spill-affected waters.



- Do not eat fish, shellfish, and other seafood from the area with oily residue, or fish that has petroleum odor.
- Prevent pets from entering oil-contaminated areas.
- Wash skin, which has come in contact with oil-contaminated water, with soap and water.
- Consult the doctor if symptoms do not improve.

For Responders and Clean-up Workers:

- Wear protective gear, like gowns, gloves, boots, and goggles.
- Dispose of used gloves properly.
- Wash oiled clothing and goggles after each clean-up operation.

Reference

Department of Health. (2005). Health Advisory on Oil Spill.

Image from <http://www.chrispforr.net/row2/chrisphil5/top2006/top2006.htm>



Radiation

There are risks associated with exposure to radiation; however, there is little likelihood of harm to anyone in the Philippines arising from radiation-emitting radioactive substances.

Frequently Asked Questions

1. *What is radiation?*

It is a form of energy transmitted through a distance. There are several different types of radiation with different properties. The type that is of most concern is radiation emitted by radioactive substances from damaged nuclear reactors.

2. *What are radioactive substances?*

These are unstable atoms, which decay to become stable atoms. During the decay process, these atoms may emit alpha, beta, neutron, or gamma radiation. These substances can be in the form of solid, liquid, or gas.

These substances are found in nature (background radiation) or produced artificially as in a nuclear reactor.

Everyone on Earth is exposed to natural background radiation.

3. *What is fallout?*

Fallout consists of radioactive substances released into the atmosphere that later fall on the earth's surface. These substances

could be released from a nuclear power plant or after the explosion of a nuclear weapon.

4. *What are the factors that affect fallout?*

Fallout is affected by two factors: location and wind. Fallout could occur in large and small amounts, depending on the distance from the source and the amount of radioactive substances released into the atmosphere. In general, the farther from the source, the less the fallout because of the dispersion of the radioactive substances.

5. *What are the risks of nuclear fallout in the Philippines?*

The likelihood of nuclear fallout is small. Nevertheless, if this happens, the radiation exposure is expected to be low.

6. *Is low-level exposure harmful?*

Any exposure, no matter how small, carries with it a risk or likelihood of harmful effect. However, the lower the exposure, the lower the risk.

There is very small risk of a long-term effect. This effect may or may not be seen in the exposed person. Moreover, radiation effects are not contagious.

Reference

Bureau of Health Devices and Technology, DOH. (2009) Radiation Health Advisory

Tsunami

Tsunamis are giant ocean waves caused by underwater earthquake or volcanic eruption.

Before and During a Tsunami

- Know your local community's suggested evacuation routes to safe areas, where shelter can be provided while you await the "all clear."
- Be prepared to survive on your own for at least 3 days. Prepare an emergency kit for your home and car, along with a portable one.
- Consider taking a first aid course and learn survival skills.
- Tune in to a radio or TV station that serves your area and listen for instructions from emergency officials. Follow these instructions and wait for the "all clear" before returning to the coast.
- Stay away from the beach—do not go down to watch an incoming tsunami.
- Move inland to higher ground immediately and stay there.
- If there is a noticeable recession in the water away from the shoreline, this is considered "nature's tsunami warning" and you should move away immediately.

After a Tsunami

- Stay away from flooded and damaged areas until officials say it is safe to go back.
- Stay away from debris in the water – it could cause health and safety risks.
- Save yourself first, not your possessions.



- Help injured or trapped people—give first aid where appropriate.
- Do not move seriously injured persons unless they are in immediate danger or exposed to further injury.
- Help others, like elderly people, small children, or persons with disabilities, who may require special assistance.
- Stay out of the building if water remains around it; tsunami waters, like flood waters, can cause buildings to sink and collapse.
- Check food supplies. Any food that has come in contact with flood waters should be thrown out because it may be contaminated.

Reference

Do Something .Org. (2011). How to Prepare For and Be Safe During a Tsunami. Retrieved from <http://www.dosomething.org/tipsandtools/how-be-prepare-and-be-safe-during-a-tsunami>

Image from <http://www.israelshamir.net/English/Tsunami.htm>



Typhoon



Typhoons (tropical cyclones), also known as *bagyo*, hit the country around 19 times in a typical year. Typhoons bring strong winds and heavy rains resulting in flooding, great damage to crops, houses and buildings, and death due to accidents. Climate change affects the increase in the intensity of typhoons.

Coping with Typhoons

Preparations for Typhoon

- Tune in to the radio or TV, or log on to the Internet, for regular updates on the weather.
- Have an emergency kit ready. Fill a watertight box/container with canned goods, soda crackers, bottled water, and other ready-to-eat, non-perishable food items. Include a flashlight with extra batteries, transmitter radio with battery, mobile phone, blanket, and clothing.

During Strong Winds and Heavy Rains

- Watch out for falling debris (roof tiles,

signs, GI sheets, tree branches, etc.).

- When inside the house or building, do not stay near the windows and watch out for broken glass.
- Unplug all electrical appliances.
- Do not get close to the riverbank or seashore.

During Floods

- Evacuate to a higher ground.
- Secure children on a higher ground or on a flotation device.
- Wear a protective head gear or helmet while evacuating.
- Use a rope to secure yourself.
- Carry the elderly or sick on your back.
- Watch out for open manholes or side ditches. Use a stick to check the safety around your feet when walking on flooded areas.

Call for HELP:

- National Disaster and Risk Reduction and Management Council (NDRRMC) hotlines: (02) 911-1406, (02) 912-2665, (02) 912-5668
- Philippine National Police (PNP) Hotline Patrol: call 117 or send TXT PNP to 2920

Reference

Information Plaza Osaka. (n.d.) What to Do in an Emergency: Typhoons. Retrieved from <http://www.city.osaka.lg.jp/contents/wdu020/enjoy/en/emergency/06.html> d.).

Image from <http://gabusa.org/2009/09/29/226/>

SECTION E
PHILIPPINE HEALTH ADVISORIES

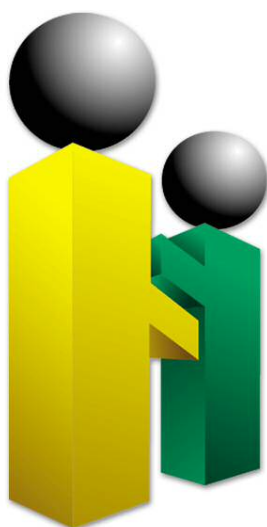
For Better
Health

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PhilHealth and Its Benefits

PhilHealth provides adequate and affordable social health insurance to all Filipinos.

Inpatient coverage:
Subsidy for room and board, drugs and medicines, laboratories, operating room and professional fees for confinements of not less than 24 hours



Outpatient coverage: Day surgeries, dialysis and cancer treatment procedures such as chemotherapy and radiotherapy in accredited hospitals and free-standing clinics

No Balance Billing (NBB)

NBB is one of PhilHealth's latest initiatives. With NBB, members need not pay extra beyond the package rate.

1. Know the package rates.

Case	Rate
Medical Case	
Dengue I	8,000
Dengue II	16,000
Pneumonia I	15,000
Pneumonia II	32,000
Essential Hypertension	9,000
Cerebral Infarction (CVA I)	28,000

Cerebro-vascular Accident (hemorrhage) (CVA II)	38,000
Acute Gastroenteritis (AGE)	6,000
Asthma	9,000
Typhoid Fever	14,000
Leptospirosis	11,000
Newborn Care Package in Hospitals and Lying-in Clinics	1,750
Animal Bite Treatment Package (ABTP)	3,000
Surgical Case	
Radiotherapy	3,000
Hemodialysis	4,000
Maternity Care Package (MCP)	8,000
(NSD) Package	
Level 1 Hospitals	8,000
Level 2-3 Hospitals	6,500
Caesarean Section	19,000
Cholecystectomy	31,000
Dilatation and Curettage	11,000
Thyroidectomy	31,000
Herniorrhaphy	21,000
Mastectomy	22,000
Hysterectomy	30,000
Cataract Surgery	16,000

2. **Demand your benefits.**

No Balance Billing means that you do not have to pay any fee for those covered by the package rate.

Everything you need is covered.

- Drugs
- Supplies
- Laboratories
- Diagnostic procedures
- Other necessary items

NBB applies to all government PhilHealth-accredited hospitals and non-hospital facilities:

- Dialysis centers
- Birthing homes
- Lying-in clinics
- Ambulatory surgical clinics

For direct filing of claims, present your:

- PhilHealth ID or any valid ID
- Statement of Account (SoA)
- Official Receipts (OR) or waiver from the providers

3. **You have the right to NBB.**

- **Sponsored Program members and dependents**
 - When admitted in service (ward) beds of accredited government hospitals and accredited non-government facilities;
 - When claiming for reimbursements for outpatient



surgeries, hemodialysis, and radiotherapy performed in accredited government hospitals and non-hospital facilities; and

- When availing yourself of existing outpatient packages for TB-DOTS, malaria, and HIV-AIDS.

- **Any other member types for Maternity Care Package (MCP) and Newborn Care Package in all accredited (MCP) non- hospital providers (e.g., maternity clinics, birthing homes)**

References

- PhilHealth. (2011). Circular No. 011 - 2011. New PhilHealth Case Rates for Selected Medical Cases and Surgical Procedures and the No Balance Billing Policy.
- PhilHealth. (2012). "Sapat na ang PhilHealth" brochure.

Share Your Blood

Sharing or donating blood is easy and rewarding. You will not feel any ill effects after donating blood and you can save the life of someone who needs your kind of blood. Knowing your blood type can be important, especially during emergencies. Should you need a blood transfusion, finding the right type for you will be faster.

Did you know that...

- At present, an average of 4 cases need blood transfusion every month in any hospital.
- 3 out of 10 cases who need blood do not get it because there is not enough supply.
- Blood from a paid donor is 3 times more likely to have any of the four blood transmissible diseases—malaria, syphilis, hepatitis B, or AIDS.

Are you qualified to share your blood?

YES, if you:

- Are 16-65 years old
- Weigh at least 45 kilograms or 100 pounds

How do you donate blood?

- Register as potential blood donor at the nearest Blood Collection Unit (BCU) located in a government hospital.
- Have your health history taken.
- Undergo a physical examination to check on your weight, temperature, pulse, and blood pressure.
- Have a blood test to determine your blood group or type.



If you meet all the physical requirements and pass the medical examinations, you can share your blood. You do not pay any fee.

What happens after you donate blood?

Sharing your blood is easy. It takes only 5-10 minutes and 250-450 milliliters of your blood. This amount is replenished by the body within 3-5 hours. No special food is required except the increase in fluid intake.

- After donating blood, rest for a few minutes before getting up. You may have your snack afterwards.
- Keep the dressing on the needle mark (where blood was drawn) on your arm dry for 24 hours. The skin around the mark may become discolored. It is not dangerous and will disappear after several days.



- You can resume your usual activities immediately, unless your job requires you to be fully alert, such as operating heavy equipment and driving. If this is your kind of job, you may resume your activities after at least 6 hours.

A normal and healthy person can give blood every 3 months without harmful effects to the body.

What conditions prevent you from sharing blood?

- Cancer
- Diabetes
- Hyperthyroidism
- Cardiovascular diseases
- Severe psychiatric disorder
- Epilepsy/convulsions
- Severe bronchitis and other lung disorders, such as TB, AIDS, syphilis, and other sexually transmitted diseases (past or present)
- Malaria
- Kidney and liver diseases, such as hepatitis
- Prolonged bleeding
- Use of prohibited drugs

Reference

DOH Philippines. (2005). Health Advisory titled "Share Your Blood."

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PHILIPPINE HEALTH ADVISORIES

Department of Health

National Center for Health Promotion
National Center for Disease Prevention and Control
Manila, Philippines
2012

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