



TECHNICAL NOTES

Compendium of Philippine Environment Statistics 2010 – 2019

Component 5: Human Settlements and Environmental Health

I. Conceptual Framework

Compendium of Philippine Environment Statistics (CPES)

The compendium covers a core set of environment statistics grouped into six components namely: 1) environmental conditions and quality; 2) environmental resources and their use; 3) residuals; 4) extreme events and disasters; 5) human settlements and environmental health; and 6) environment protection, management, and engagement.

As described in the Framework for the Development of Environment Statistics (FDES), Basic Set of Environment Statistics has been set up following the progression of three tiers, based on the level of relevance, availability, and methodological development of the statistics. Tier 1 is the core set of environment statistics that serve as agreed and limited set of environment statistics that are of high priority and relevance to most countries. Tier 2 includes environment statistics which are of priority and relevance to most countries but require greater investment of time, resources, or methodological development. It is recommended that countries consider producing them in the medium-term. Tier 3 includes environment statistics which are either of lower priority or require significant methodological development. It is recommended that countries consider producing them in the long-term.

Component 5: Human Settlements and Environmental Health

The human settlements and environmental health component contain statistics on the environment in which humans live and work, particularly with regard to their living conditions and environmental health. These statistics are important for the management and improvement of conditions related to human settlements, shelter conditions, safe water, sanitation, and health, particularly in the context of rapid urbanization, increasing pollution, environmental degradation, disasters, extreme events, and climate change.

Compiled statistics in this component may provide indicators helpful to achieve the following Sustainable Development Goals (SDGs): SDG 3 –

to ensure healthy lives and promote well-being for all at all ages, SDG 6 – to ensure access to water and sanitation for all, and SDG 11 – to make all cities inclusive, safe, resilient, and sustainable. Component 5 also contains statistics related to SDG 7 – to ensure access to affordable, reliable, sustainable, and modern energy for all, and SDG 13 – to combat climate change and its impact.

Subcomponent 1.1: Human Settlements

This subcomponent includes relevant statistics on basic services and infrastructure of human settlements. Human settlements refer to the totality of the human community, whether people live in large cities, towns, or villages. They encompass the human population that resides in a settlement, the physical elements (e.g., shelter and infrastructure), services (e.g., water, sanitation, waste removal, energy, and transport), and the exposure of humans to potentially deleterious environmental conditions.

There are five topics under this subcomponent. The first topic is the urban and rural population which covers statistics on urban, rural, and total population, including population density. These statistics provide information on locations where humans construct and maintain their settlements.

Second is the access to selected basic services which includes relevant statistics on the population using an improved drinking water source, the population using an improved sanitation facility, the price of water supplied, the population served by municipal waste collection, and households with access to electricity and its price.

The third topic is the housing conditions which contains information on the sufficiency of housing in terms of the following characteristics: population access to an adequate dwelling; the characteristics of the houses in which both rural and urban population live, including the quality of the houses (e.g., building materials) and location in a safe or a hazard-prone area.

Fourth is exposure to ambient pollution which includes complementary information describing how the spatial location of populations around sources of pollution exposes them to possible health effects. Statistics for this topic include the number of people exposed to air or noise pollutants in main cities.

Finally, the fifth topic is environmental concerns specific to urban settlements which organizes information about additional urban environmental concerns such as transport, green spaces, and urban planning and zoning. With regard to transportation, statistics may include the number of private, public, and commercial vehicles by engine type, as well as the extent of roadway infrastructure. Most importantly, from the environment statistics perspective, additional statistics should include the number of passengers transported by public transportation systems and the number of passengers transported annually by hybrid and electric modes of transportation.

Subcomponent 1.2: Environmental Health

Environmental health focuses on how environmental factors and processes impact and change human health. It can be defined as an interdisciplinary field that focuses on analyzing the relationship between public health and the environment. From the health perspective, the World Health Organization (WHO) states that environmental health addresses all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviors. It encompasses the assessment and control of those environmental factors that can potentially affect health.

There are five topics under this subcomponent. The first topic is on airborne diseases and conditions which includes all airborne diseases and conditions that are caused or worsened by exposure to unhealthy levels of pollutants (such as PM, SO₂, and O₃).

Second topic is about water-related diseases and conditions which contain all water-related diseases and conditions that result from microorganisms and chemicals in the water that humans drink as defined by the WHO.

Third is vector-borne diseases that are transmitted by organisms (e.g., insects and arachnids) that carry viruses, bacteria, protozoa, and other pathogens.

The fourth topic is health problems associated with excessive UV radiation exposure. This topic includes statistics on the incidence and prevalence of melanoma and other skin cancers, and the incidence and prevalence of cataracts associated with excessive and prolonged UV radiation exposure.

The last topic is about toxic substance- and nuclear radiation-related diseases and conditions. This topic includes diseases and conditions associated with exposure to toxic substances, residuals, and/or waste that result from localized emissions. This includes health statistics on morbidity (such as incidence and prevalence) and mortality of these diseases or conditions, as well as measurement of the associated impact on the labor force and economic costs.

II. Compilation Methodology and Data Sources

Following the structure and statistics listed in the FDES, data available within the national statistical system were identified and requested from data source agencies or gathered from statistical publications. The collected data are checked for consistency and formatted into statistical tables. The data for Component 5 of the CPES were obtained from the following:

Data Item	Source
Human Settlements	
<ul style="list-style-type: none"> • Number of households with access to improved water supply by region and by level • Number of households with sanitation facility 	Field Health Services Information System Annual Report, Department of Health
<ul style="list-style-type: none"> • Number of Registered Vehicles by Region, by Type of Ownership and by Type of Fuel Used 	Management Information Division, Land Transportation Office
Environmental Health	
<ul style="list-style-type: none"> • Water Borne Diseases Cases and Deaths by Region, by Age, by Sex <ul style="list-style-type: none"> - Typhoid and Paratyphoid Fever - Acute Bloody Diarrhea - Confirmed Cholera - Viral Hepatitis - Rotavirus - Leptospirosis • Vector Borne Diseases Cases and Deaths by Region, by Age, by Sex <ul style="list-style-type: none"> - Dengue - Chikungunya 	Field Health Services Information System Annual Report, Epidemiology Bureau, Department of Health Philippine Integrated Disease Surveillance and Response, Epidemiology Bureau, Department of Health

Data Item	Source
<ul style="list-style-type: none"> - Malaria • Airborne Diseases Cases and Deaths by Region, by Age, by Sex <ul style="list-style-type: none"> - Measles - Acute Lower Respiratory Tract Infection and Pneumonia 	<p>Vital Statistics Division, Philippine Statistics Authority</p> <p>Public Health Surveillance Division, Epidemiology Bureau, Department of Health</p>

The Field Health Services Information System is an Annual Report of the Department of Health reports a nationwide facility-based recording and reporting system that provides information to the Local Government Units (LGUs) and the Department of Health (DOH) as basis for decision-making relative to the management and implementation of public health programs throughout the country. As stipulated in Executive Order No. 352 – Annex 1, the FHSIS is one of the statistical activities designated by the then National Statistical Coordination Board (NSCB) that will generate critical data for decision-making by administrators, planners and policy makers in the government and private sector. The Notifiable Disease Reporting System (NDRS) refers to the component of the FHSIS that provides the DOH with field-based surveillance and program management information on the different public health programs. Data are generated from the barangay health stations, rural health units and municipal or city health centers. Meanwhile, the Philippine Integrated Disease Surveillance and Response (PIDSR) is an integrated approach for strengthening the Philippine epidemiologic surveillance and response system. It captures cases from disease reporting units from all over the country using a standard case definition per a particular disease.

III. Concepts and Definitions

- a. Acute Bloody Diarrhea - This is also called dysentery. This is diarrhea with visible blood in the feces. Important effects of dysentery include anorexia, rapid weight loss, and damage to the intestinal mucosa by the invasive bacteria. A number of other complications may also occur. The main cause of acute dysentery is *Shigella*; other causes are *Campylobacter jejuni* and, infrequently, entero-invasive *E. coli* or *Salmonella*. *Entamoeba histolytica* can

cause serious dysentery in young adults but is rarely a cause of dysentery in young children. (*Readings on Diarrhea, Student Manual, World Health Organization*)

- b. Acute lower respiratory tract infection - This is an infection that may interfere with normal breathing. This affects the lower respiratory tract which covers the continuation of the airways from the trachea and bronchi to the bronchioles and the alveoli. This infection is particularly dangerous for children, older adults, and people with immune system disorders. (*Disease Control Priorities in Developing Countries. 2nd edition*)
- c. Airborne diseases and conditions - Diseases associated with the environment are caused or worsened by exposure to unhealthy levels of pollutants (such as PM, SO₂, and O₃), usually found in urban settlements and, in particular, in cities with weaker air quality regulations and/or enforcement capabilities. (*FDES Glossary, 2013*)
- d. Alternative fuel or power sources for motor Vehicles: CNG, LPG (AutoLPG) Light EV (LEV) – Compressed Natural Gas, Liquefied Petroleum Gas, Two-wheeled or three-wheeled electric vehicles (*Memorandum Circular No. 2020-2240-Private Motor vehicle Inspection Standards and IRR, Land Transportation Office*)
- e. Basic safe water supply - Drinking from an improved drinking-water source. (*Field Health Services Information System (FHSIS) Manual of Operations Version 2018*)
- f. Basic Sanitation Facility - Composed of a sub, mid, and superstructure that collects excreta or sewage and conveyed in a containment tank (pit latrine or septic tank). (*Field Health Services Information System (FHSIS) Manual of Operations Version 2018*)
- g. Chikungunya - This is a viral disease transmitted to humans by infected mosquitoes. It is caused by the chikungunya virus (CHIKV). It is an RNA virus that belongs to the alphavirus genus of the family Togaviridae. The name “chikungunya” derives from a word in the Kimakonde language, meaning “to become contorted”, and describes the stooped appearance of sufferers with joint pain (arthralgia). A CHIKV infection causes fever and severe joint pain. Other symptoms include muscle pain, joint swelling, headache, nausea, fatigue and rash. Joint pain associated with chikungunya is often debilitating and can vary in duration. (*Chikungunya, Fact Sheet from the World Health Organization*)

Chikungunya Case Definition:

Suspect Case: A patient with acute onset of fever, rash (over limbs or trunk) and severe arthralgia or arthritis not explained by other medical conditions.

Confirmed Case: A suspect case with any of the following CHIK specific tests:

- Detection of viral RNA by RT-PCR
- Detection of IgM in single serum sample (collected during acute or convalescent phase)
- Four-fold increase in CHIK-specific antibody titers (samples collected at least two to three weeks apart)
- Viral isolation

(Public Health Surveillance Division, Epidemiology Bureau, Department of Health)

- h. **Confirmed Cholera** - This is an intestinal infection caused by ingestion of food or water contaminated with the bacterium *Vibrio cholera*. A confirmed case means verified by laboratory analysis. Its incubation period ranges from less than 1 day to 5 days. The infection causes a profuse, 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 deadly disease. A healthy individual may die within 2 to 3 hours if no treatment is provided. *(Water-Borne Diseases Advisory, 29 July 2017, Department of Health)*
- i. **Dengue** - This is a mosquito-borne viral infection, found in tropical and sub-tropical climates worldwide, mostly in urban and semi-urban areas. The virus responsible for causing dengue, is called dengue virus (DENV) which is transmitted by day biting *Aedes aegypti* and *Aedes albopictus* mosquitoes. There are four DENV serotypes (DENV1, DENV2, DENV3, and DENV4), meaning that it is possible to be infected four times. Dengue illness is categorized according to level of severity as dengue without warning signs, dengue with warning signs and severe dengue. While many DENV infections produce only mild illness, DENV can cause an acute flu-like illness. Occasionally this develops into a potentially lethal complication, called severe dengue. *(Dengue and Severe Dengue, Fact Sheet from the World Health Organization and Health Advisory from the Department of Health)*

Case Classification:

Suspect: A previously well person with acute febrile illness of 2 to 7 days duration with clinical signs symptoms of dengue.

Probable: A suspect case plus: Laboratory test, at least CBC (leucopenia with or without thrombocytopenia) and/or Dengue NS1, antigen test or dengue IgM antibody test (optional)

Confirmed: Viral culture isolation; Polymerase Chain Reaction
(*Public Health Surveillance Division, Epidemiology Bureau, Department of Health*)

- j. Diesel - Motor vehicles operating on diesel fuel. (*Land Transportation Office*)
- k. Diplomatic - Motor vehicles owned by foreign governments or by their duly accredited diplomatic officers in the Philippines and used in the discharged of their official duties. (*Republic Act No. 4136 - An Act to Compile the Laws Relative to Land Transportation and Traffic Rules, to Create a Land Transportation Commission and for Other Purposes*)
- l. Disease - This refers to a specific illness or medical condition, irrespective of origin or source that directly presents or has the potential to present significant harm to humans. {*Manual of Procedures for Philippine Integrated Disease Surveillance and Response (PIDSR) 3rd Edition, April 2014*}
- m. Epidemiology - Refers to the study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to the control of health problems. {*Manual of Procedures for Philippine Integrated Disease Surveillance and Response (PIDSR) 3rd Edition, April 2014*}
- n. Exempt (Tax Exempt) - Special purpose vehicles which acquire or invest in non-performing assets that were granted tax exemptions and fee privileges. (*Republic Act No. 9182 - An Act Granting Tax Exemptions and Fee Privileges to Special Purpose Vehicles which Acquire or Invest In Non-Performing Assets, Setting the Regulatory Framework Therefor, and for Other Purposes*)
- o. For-Hire Vehicle - A motor vehicle duly authorized to be used as a public utility by virtue of a Certificate of Public Convenience (CPC). (*Republic Act No. 4136 - An Act to Compile the Laws Relative to Land Transportation and Traffic Rules, to Create a Land Transportation Commission and for Other Purposes*)
- p. Gas - Motor vehicles operating on gasoline fuel. (*Land Transportation Office*)

- q. Government Vehicle - Motor vehicles owned by the government of the Philippines or any of its political subdivisions. (*Republic Act No. 4136 - An Act to Compile the Laws Relative to Land Transportation and Traffic Rules, to Create a Land Transportation Commission and for Other Purposes*)
- r. Households with access to improved safe water supply - This refers to the number of households (HHs) with reasonable means of getting basic safe water from the different types of improved drinking-water supply. {*Field Health Services Information System (FHSIS) Manual of Operations Version 2018*}
- s. Households using safely managed sanitation services – Refers to the number of HHs using safely managed sanitation services
- (1) sanitation facility is not shared with other HHS and
 - (2) the sewage/excreta should either be:
 - stored in a containment tank and treated (in situ) and application of sanitation by-products for reuse/disposal or
 - stored in a containment tank desludged, transported, treated and disposed off-site and application of sanitation by-products for reuse/disposal OR
 - stored in a containment tank or conveyed through a sewer/sewerage system and treated off-site and application of sanitation by-products for reuse/disposal
- {*Field Health Services Information System (FHSIS) Manual of Operations Version 2018*}
- t. Households with Complete Sanitation Facility - This refers to the number of households that met all the following three criteria of complete sanitation elements:
- Satisfactory solid waste management/disposal
 - Access to basic safe water source
 - With access to sanitary toilet facility
- u. Households with Sanitation Facility - This refers to the number of households with sanitation facility such as:
- (a) pour/flush toilet connected to a septic tank and/or to sewerage system or any other approved treatment system (e.g., anaerobic baffled reactor), and
 - (b) ventilated improved pit latrine (VIP)
- {*Field Health Services Information System (FHSIS) Manual of Operations Version 2018*}

- v. Households with Satisfactory Solid Waste Management - This refers to the households that have satisfactory solid waste management that corresponds to the following waste management practice/s:
- Waste segregation, backyard composting, recycling/reuse; OR
 - Waste segregation and collected by city/municipal collection and disposal system.
- {*Field Health Services Information System (FHSIS) Manual of Operations Version 2018*}
- w. Improved drinking-water source - This includes the use of the following: piped water into dwelling, plot, or yard; public tap or standpipe; borehole or tube well; protected dug well; protected spring; rainwater collection and bottled water (if a secondary available source is also improved). (*FDES Glossary, 2013*)
These are which by nature of their design, and construction, have the potential to deliver safe water such as Level I, II and III water system. {*Field Health Services Information System (FHSIS) Manual of Operations Version 2018*}
- x. Improved safe water supply - These are general guidelines that conform to set standards for drinking-water quality, water sampling and evaluation of results upon examination. These standards are consistent with the improved framework for drinking-water safety promoted by WHO which comprised of three key components namely: health-based targets established by the authority; safely managed water systems (application of water safety plan); and, a system of independent surveillance. (*DOH Launches Philippine National Standards for Drinking Water of 2017, Department of Health*)
- y. Improved sanitation facility - This is defined as one that hygienically separates human excreta from human contact. Improved facilities include flush/pour flush toilets or latrines connected to a sewer, -septic tank, or -pit, ventilated improved pit latrines, pit latrines with a slab or platform of any material which covers the pit entirely, except for the drop hole and composting toilets/latrines. (*FDES Glossary, 2013*)
- z. Leptospirosis - This is a bacterial infection transmitted by rats through urine and feces. It can contaminate the soil, water, and vegetation. It is caused by *Leptospira spirochetes* bacteria. Its mode of transmission includes ingesting contaminated food or water, or when broken skin or open wounds are exposed to floodwaters. Its

incubation period is 7 to 10 days. (*Water-Borne Diseases Advisory, 29 July 2017, Department of Health*)

Leptospirosis Case Definition:

Suspect Case: A person who developed acute febrile illness with headache, myalgia and prostration associated with any of the following: Conjunctival suffusion, Meningeal irritation, Anuria or oliguria and/or proteinuria, Jaundice, Hemorrhages (from the intestines or lungs), Cardiac arrhythmia or failure, skin rash. Possibly AFTER exposure to infected animals or an environment contaminated with animal urine (e.g., wading in flood waters, rice fields, and drainage)

Probable Case: A suspected case in an ongoing epidemic or epidemiological linked to a confirmed case OR a clinically tested positive by Rapid Test Kits.

Confirmed Case: A suspect case that is laboratory confirmed via:

- Isolation (and typing) from blood or other clinical materials through culture of pathogenic *Leptospira*.
- Positive serology, preferably Microscopic Agglutination Test (MAT) or Polymerase Chain Reaction (PCR), using a range of *Leptospira* strains for antigens that should be a representative of local strains. (*Public Health Surveillance Division, Epidemiology Bureau, Department of Health*)

- aa. Level I (Point Source) - This refers to a protected well or a developed spring with an outlet but without distribution system, generally adaptable for rural areas where the houses are thinly scattered. A Level I facility normally serves around 15 to 25 HHs and its outreach must not be more than 250 meters from the farthest user. (*Field Health Services Information System (FHSIS) Manual of Operations Version 2018*)
- bb. Level II (Communal Faucet System or Stand Posts) - This refers to a system composed of a source, with or without a reservoir, a piped distribution network, and communal faucets located not more than 25 meters from the farthest house. The system is designed to deliver 40 to 80 liters per capita per day to an average of 100 HHs, with one faucet per 4 to 6 HHs. It is generally suitable for rural and urban areas where houses are clustered densely enough to justify a simple pipe system.

Note: For reporting purposes Level II system may also include a communal faucet connected to Level III where group of households get their water supply (*Field Health Services*)

Information System (FHSIS) Manual of Operations Version 2018}

- cc. Level III (Waterworks System or Individual House Connection) - This refers to a system with a source, with or without reservoir, a piped distribution network and HH taps. It is generally suited for densely populated areas.

Note: For reporting purposes Level III system may also include a Level I system with piped distribution for household tap serving group of household dwellings {Field Health Services Information System (FHSIS) Manual of Operations Version 2018}

- dd. Malaria - This is a disease caused by one or more species of the protozoan parasite called Plasmodium which is usually transmitted through the infective bite of a female Anopheles mosquito, and rarely through blood transfusion or the sharing of contaminated needles and syringes. As a disease, it may result in death if not promptly detected and properly treated. Malaria was historically the most common and most persistent mosquito-borne infection in the Philippines (although it is now being overtaken by arbovirus infections like dengue). (*Malaria Control Program, Department of Health*)

There are 5 parasite species that cause malaria in humans, and 2 of these species – *P. falciparum* and *P. vivax* – pose the greatest threat. (*Malaria, Fact Sheet from the World Health Organization*)

- ee. Measles - A highly contagious respiratory disease caused by a virus. It is transferred from person-to-person by sneezing, coughing, and close personal contact. Its signs and symptoms include cough, runny nose, red eyes/conjunctivitis, fever, skin rashes lasting for more than 3 days. (*DOH Declares Measles Outbreak in NCR, Department of Health*)
- ff. Motor Vehicle - Refers to any vehicle propelled by any power other muscular power using the public highways but excepting road rollers, trolley cars, street sweepers, sprinklers, lawn mowers, bulldozers, graders, forklifts, amphibian trucks, and cranes if not used on public highways, vehicles which run only on rails or tracks and tractors, trailers and traction engines of all kinds used exclusively for agricultural purposes. (*Republic Act No. 4136 - An Act to Compile the Laws Relative to Land Transportation and Traffic Rules, to Create a Land Transportation Commission and for Other Purposes*)

- gg. Notifiable Disease - Refers to the disease that, by legal requirements, just be reported to the public health or other authority in the pertinent jurisdiction when the diagnosis is made. *{Manual of Procedures for Philippine Integrated Disease Surveillance and Response (PIDSR) 3rd Edition, April 2014}*
- hh. Paratyphoid fever - This is a clinically similar illness but often less severe disease than typhoid fever which is caused by Salmonella Paratyphi A and B (or uncommonly Paratyphi C).
- ii. Pneumonia - This is a form of acute respiratory infection that affects the lungs. The lungs are made up of small sacs called alveoli, which fill with air when a healthy person breathes. When an individual has pneumonia, the alveoli are filled with pus and fluid, which makes breathing painful and limits oxygen intake. *(Pneumonia, Fact Sheet from the World Health Organization)*
- jj. Private Vehicle - A motor vehicle duly registered with LTO and allowed for private use only. *(Republic Act No. 4136 - An Act to Compile the Laws Relative to Land Transportation and Traffic Rules, to Create a Land Transportation Commission and for Other Purposes)*
- kk. Registered Motor Vehicles - All motor vehicles and trailer of any type used or operated on or upon any highway of the Philippines that were properly registered for the current year in accordance with the provisions under Republic Act No. 4136. *(Republic Act No. 4136 - An Act to Compile the Laws Relative to Land Transportation and Traffic Rules, to Create a Land Transportation Commission and for Other Purposes)*
- ll. Rotavirus - These are wheel-shaped (“rota-“) viruses that cause intestinal illnesses and are the most common cause of severe diarrhea among infants and children. The virus may be found in water sources such as private wells that have been contaminated with the feces from infected humans. *(Rotavirus and Drinking Water from Private Wells, Centers for Disease Control and Prevention)*

Rotavirus Case Definition

Suspect: Any child who is less than 5 years of age and is currently undergoing treatment for acute diarrhea in any participating sentinel hospital.

More Specifically:

- A child < 5 years of age includes children aged 0 to 4 years, 11 months and 29 days;

- “Undergoes treatment” means that the child has received intravenous (IV) rehydration therapy while undergoing observation in the Emergency Room or has admitted in the hospital ward for acute diarrhea;
- Acute diarrhea is defined as the passage of three or more loose or watery stools within a 24-hour period for <14 days;
- A participating hospital is one of the sentinel hospitals sites for rotavirus surveillance.

Confirmed: A suspect case that has been laboratory-confirmed as Rotavirus. (*Public Health Surveillance Division, Epidemiology Bureau, Department of Health*)

- mm. Typhoid fever - This is an infectious disease which is also known as enteric fever or just typhoid. It is caused by bacteria known as *Salmonella typhi*. It spreads through contaminated food and water or through close contact with someone who is infected. Signs and symptoms include high- and low-grade fever for several days, headache, weakness, loss of appetite, either diarrhea or constipation, and abdominal discomfort. (*Water-Borne Diseases Advisory, 29 July 2017, Department of Health*)
- nn. Vector-borne diseases - These are human illnesses caused by parasites, viruses and bacteria that are transmitted by vectors. Vectors are living organisms that can transmit infectious pathogens between humans, or from animals to humans. Many of these vectors are bloodsucking insects, which ingest disease-producing microorganisms during a blood meal from an infected host (human or animal) and later transmit it into a new host, after the pathogen has replicated. Often, once a vector becomes infectious, they are capable of transmitting the pathogen for the rest of their life during each subsequent bite/blood meal. (*World Health Organization*)
- oo. Viral Hepatitis - This is one of the oldest diseases known to humankind, is an infectious disease and caused by Hepatitis A virus (HAV). The most common mode of transmission is ingestion of food contaminated with human waste and urine of persons who have Hepatitis A. Its symptoms usually include fever, flu-like symptoms such as weakness, muscle and joint aches, loss of appetite and dizziness. Other symptoms may be so mild that they go unnoticed. (*Water-Borne Diseases Advisory, 29 July 2017, Department of Health*)
- pp. Water-borne diseases - Diseases transmitted through water contaminated with human or animal waste. These include typhoid

fever, paratyphoid fever, acute bloody diarrhea, cholera, rotavirus, leptospirosis, and hepatitis A. (*Water-Borne Diseases Advisory, 29 July 2017, Department of Health*)

IV. Dissemination of Results and Revision

The Compendium of Philippine Environment Statistics is published bi-annually with three (3) components are release and posted in PSA website every year. The web release material includes press release, statistical tables, infographics, and social cards.

List of Statistical Tables:

Table 5.1	Number of Households with Access to Improved Water Supply by Region, by Level, 2010 to 2019
Table 5.2	Number of households with sanitation facility by Region, by Type, 2010 to 2019
Table 5.3	Number of Registered Vehicles by Region, by Type of Ownership, by Type of Fuel Used, 2010 to 2019
Table 5.4.1a	Typhoid and Paratyphoid Fever Cases and Deaths by Region, 2010 to 2019
Table 5.4.1b	Typhoid and Paratyphoid Fever Cases and Deaths by Sex, 2010 to 2019
Table 5.4.1c	Typhoid and Paratyphoid Fever Cases and Deaths by Age Group, 2010 to 2019
Table 5.4.2a	Acute Bloody Diarrhea Cases and Deaths by Region, 2010 to 2019
Table 5.4.2b	Acute Bloody Diarrhea Cases and Deaths by Sex, 2010 to 2019
Table 5.4.2c	Acute Bloody Diarrhea Cases and Deaths by Age Group, 2010 to 2019
Table 5.4.3a	Confirmed Cholera Cases and Deaths by Region, 2010 to 2019
Table 5.4.3b	Confirmed Cholera Cases and Deaths by Sex, 2010 to 2019
Table 5.4.3c	Confirmed Cholera Cases and Deaths by Age Group, 2010 to 2019
Table 5.4.4a	Viral Hepatitis Cases and Deaths by Region, 2010 to 2019
Table 5.4.4b	Viral Hepatitis Cases and Deaths by Sex, 2010 to 2019

Table 5.4.4c	Viral Hepatitis Cases and Deaths by Age Group, 2010 to 2019
Table 5.4.5a	Rotavirus Cases and Deaths by Region, 2015 to 2019
Table 5.4.5b	Rotavirus Cases and Deaths by Sex, 2015 to 2019
Table 5.4.5c	Rotavirus Cases and Deaths by Age Group, 2015 to 2019
Table 5.4.6a	Leptospirosis Cases and Deaths by Region, 2010 to 2019
Table 5.4.6b	Leptospirosis Cases and Deaths by Sex, 2010 to 2019
Table 5.4.6c	Leptospirosis Cases and Deaths by Age Group, 2010 to 2019
Table 5.5.1a	Dengue Cases and Deaths by Region, 2010 to 2019
Table 5.5.1b	Dengue Cases and Deaths by Sex, 2010 to 2019
Table 5.5.1c	Dengue Cases and Deaths by Age Group, 2010 to 2019
Table 5.5.2a	Chikungunya Cases and Deaths by Region, 2016 to 2019
Table 5.5.2b	Chikungunya Cases and Deaths by Sex, 2016 to 2019
Table 5.5.2c	Chikungunya Cases and Deaths by Age Group, 2016 to 2019
Table 5.5.3a	Malaria Cases and Deaths by Region, 2016 to 2019
Table 5.5.3b	Malaria Cases and Deaths by Sex, 2016 to 2019
Table 5.5.3c	Malaria Cases and Deaths by Age Group, 2016 to 2019
Table 5.6.1a	Measles Cases and Deaths by Region, 2010 to 2019
Table 5.6.1b	Measles Cases and Deaths by Sex, 2010 to 2019
Table 5.6.1c	Measles Cases and Deaths by Age Group, 2010 to 2019
Table 5.6.2a	Acute Lower Respiratory Tract Infection and Pneumonia Cases and Deaths by Region, 2010 to 2019
Table 5.6.2b	Acute Lower Respiratory Tract Infection and Pneumonia Cases and Deaths by Sex, 2010 to 2019
Table 5.6.2c	Acute Lower Respiratory Tract Infection and Pneumonia Cases and Deaths by Age Group, 2010 to 2019

V. Citation

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VI. Contact Information

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