

TECHNICAL NOTES

Compendium of Philippine Environment Statistics 2014 – 2023

Component 5: Human Settlements and Environmental Health

I. Conceptual Framework

The Compendium of Philippine Environment Statistics is a compilation of environment and related socio-economic statistics collected from various government agencies. It is an adoption of the Framework for the Development of Environment Statistics (FDES) 2013.

FDES covers a core set of environment statistics which is 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) environmental protection, management, and engagement.

As described in FDES, the Basic Set of Environment Statistics has been set up following a 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 serves as an 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.

The Global Set of Climate Change Statistics and Indicators (GSCCSI) is a comprehensive statistical framework, with statistics, indicators, and metadata, designed to support countries in preparing their own sets of climate change statistics and indicators according to their individual concerns, priorities, and resources. The Global Set was developed by the United Nations Statistics Division in collaboration with the UN Framework

Convention on Climate Change. The GSCCSI consists of five thematic areas, namely: drivers, impacts, vulnerability, mitigation, and adaptation.

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.

This component has two subcomponents: human settlements and environmental health. These statistics are linked to the impact and vulnerability thematic area of the GSCCSI. These are also helpful in compiling the ecosystem condition accounts as described in the System of Environmental-Economic Accounting Ecosystem Accounting.

Subcomponent 5.1: 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.

5.1.1 Urban and rural population – covers statistics on urban, rural, and total population, including population density. These statistics provide information on locations where humans construct and maintain their settlements.

5.1.2 Access to selected basic services – 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.

5.1.3 Housing conditions – 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.

5.1.4 Exposure to ambient pollution – 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.

5.1.5 Environmental concerns specific to urban settlements – 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 5.2: 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.

5.2.1 Airborne diseases and conditions – includes all airborne diseases and conditions that are caused or worsened by exposure to unhealthy levels of pollutants (such as PM, SO₂, and O₃).

5.2.2 Water-related diseases and conditions – contain all water-related diseases and conditions that result from microorganisms and chemicals in the water that humans drink as defined by the WHO.

5.2.3 Vector-borne diseases – are transmitted by organisms (e.g., insects and arachnids) that carry viruses, bacteria, protozoa, and other pathogens.

5.2.4 Health problems associated with excessive UV radiation exposure – 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.

5.2.5 Toxic substance and nuclear radiation-related diseases and conditions – includes diseases and conditions associated with exposure to toxic substances, residuals, and/or waste that result from localized emissions. This contains 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. Data Sources

The data on human settlements and environmental health of Component 5 were obtained from the following:

Data Item	Source
Human Settlements	
<ul style="list-style-type: none"> • Total Population, Urban Population, and Level of Urbanization by Region • Total Population, Rural Population, and Percentage of Rural Population by Region 	Population and Housing Census Division, Philippine Statistics Authority (PSA)
<ul style="list-style-type: none"> • Proportion of Families with Access to Water Supply by Region and Level • Proportion of Households with Sanitation Facility by Region and Type 	Income and Employment Statistics Division and Demographic and Health Statistics Division, PSA

Data Item	Source
<ul style="list-style-type: none"> Population Supplied by Water Supply Industry 	Metropolitan Waterworks and Sewerage System Maynilad Water Services, Inc. Manila Water Company, Inc. Local Water Utilities Administration
<ul style="list-style-type: none"> Philippine Water Districts Average Yearly Water Rates 	Local Water Utilities Administration
<ul style="list-style-type: none"> Rates of Electricity by Region 	Electric Power Industry Management Bureau, Department of Energy
<ul style="list-style-type: none"> Number of Registered Vehicles by Region, Type of Ownership, Type of Fuel, Type of Motor Vehicle, and Type of Registration 	Management Information Division, Land Transportation Office
<ul style="list-style-type: none"> Length of National Roads with Classification and Surface Type 	Statistics Division, Department of Public Works and Highways
<ul style="list-style-type: none"> Existence of Urban Planning and Zoning Regulations and Instruments in Main Cities 	Environmental Land Use and Urban Planning and Development Bureau, Department of Human Settlements and Urban Development (DHSUD)
<ul style="list-style-type: none"> Population Living in Informal Settlements 	Public Housing and Settlements Service, DHSUD
Environmental Health	
<ul style="list-style-type: none"> 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 	Field Health Services Information System Annual Report, Epidemiology Bureau, Department of Health

Data Item	Source
<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 - Malaria 	<p>Philippine Integrated Disease Surveillance and Response, Epidemiology Bureau, Department of Health</p> <p>Vital Statistics Division, Philippine Statistics Authority</p>

The Field Health Services Information System (FHSIS) is an annual report of the Department of Health (DOH). It is a nationwide facility-based recording and reporting system that provides information to the Local Government Units (LGUs) and the 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 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. Compilation Methodology

Following the structure and statistics listed in the FDES 2013, data available within the national statistical system were identified and requested from data source agencies, gathered from statistical publications, or collected from websites. The collected data are checked for consistency and formatted into statistical tables.

IV. Definition of Terms

1. **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*)
2. **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*)
3. **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*).
4. **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*).

5. **Basic Drinking Water Service** – drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing (*WHO/ UNICEF JMP Report on Drinking water*).
6. **Basic Sanitation Service** – use of improved facilities that are not shared with other households (*WHO/ UNICEF JMP Report on Sanitation*).
7. **CC** – refers to the motor vehicles of the Consular Corps (*Land Transportation Office*).
8. **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

(*Manual of Procedures for Philippine Integrated Disease Surveillance and Response (PIDSR) 3rd Edition, April 2014*)

9. **CM** – refers to the motor vehicles of the Chief of Mission (*Land Transportation Office*).

10. **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)*
11. **DC** – refers to the motor vehicles of the Diplomatic Corps *(Land Transportation Office)*.
12. **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: Case that has tested positive through viral culture isolation or Polymerase Chain Reaction

(Manual of Procedures for Philippine Integrated Disease Surveillance and Response (PIDSR) 3rd Edition, April 2014)

13. **Diesel** – motor vehicles operating on diesel fuel (*Land Transportation Office*).
14. **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*).
15. **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*).
16. **Electric Vehicles** – are powered solely by an electric battery with no gas engine parts (*Land Transportation Office*).
17. **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*).
18. **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*).
19. **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*).
20. **Gas** – motor vehicles operating on gasoline fuel (*Land Transportation Office*).

21. **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*).
22. **Hybrid Electric Vehicles** – use an electric motor to assist gas-powered engines (*Land Transportation*).
23. **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*).
24. **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*)
25. **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.
(*Manual of Procedures for Philippine Integrated Disease Surveillance and Response (PIDSR) 3rd Edition, April 2014*)

26. **Limited Drinking Water Service** – drinking water from an improved source for which collection time exceeds 30 minutes for a roundtrip including queuing (*WHO/ UNICEF JMP Report on Drinking water*).
27. **Limited Sanitation Service** – use of improved facilities shared between two or more households (*WHO/ UNICEF JMP Report on Sanitation*).
28. **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*).

29. **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*)
30. **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*).

31. **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*}.
32. **OEV** – refers to the motor vehicles of the officials and members of the Administrative Staff of the different embassies, consulates, delegations, and different international organizations in the Philippines (*Land Transportation Office*).
33. **Open Defecation** – disposal of human feces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste (*WHO/ UNICEF JMP Report on Sanitation*).
34. **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*)
35. **Primary Roads** – a contiguous length of significant road sections extending linearly without any breaks or forks that connect major cities (At least around 100,000 population) comprising the main trunk line or the backbone of the National Road System (*Atlas 2022 Department of Public Works and Highways*).
36. **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*).

37. **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*).
38. **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.

(*Manual of Procedures for Philippine Integrated Disease Surveillance and Response (PIDSR) 3rd Edition, April 2014*)

39. **Safely Managed Drinking Water Service** – drinking water from an improved water source that is accessible on premises, available

when needed and free from faecal and priority chemical contamination (*WHO/ UNICEF JMP Report on Drinking water*).

40. **Safely Managed Sanitation Service** – use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated offsite (*WHO/ UNICEF JMP Report on Sanitation*).
41. **Secondary Roads** – directly connect cities to national primary roads (except in metropolitan areas) or those not included in the category of major cities. Likewise, said roads directly connect major ports, major ferry terminals, major airports, tourist service centers, major government infrastructure to national primary roads. They also directly connect provincial capitals within the same region. (*Atlas 2022 Department of Public Works and Highways*)
42. **Surface Water Drinking Water Service** – drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal (*WHO/ UNICEF JMP Report on Drinking water*).
43. **Tertiary Roads** – other existing roads under DPWH which perform a local function (*Atlas 2022 Department of Public Works and Highways*).
44. **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*)
45. **Unimproved Drinking Water Service** – drinking water from an unprotected dug well or unprotected spring (*WHO/ UNICEF JMP Report on Drinking water*).
46. **Unimproved Sanitation Service** – use of pit latrines without a slab or platform, hanging latrines or bucket latrines (*WHO/ UNICEF JMP Report on Sanitation*).

47. **USAF** – refers to the motor vehicles of the US Armed Forces (*Land Transportation Office*).
48. **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*)
49. **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*)
50. **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*)

V. Dissemination of Results and Revision

The Compendium of Philippine Environment Statistics is updated annually. The web release material includes press release, statistical tables, infographics, and social cards.

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VI. Citation

Philippine Statistics Authority. (14 November 2024). *Technical Notes on Compendium of Philippine Environment Statistics 2014 – 2023 Component 5: Human Settlements and Environmental Health*
<https://psa.gov.ph/content/gasoline-powered-vehicles-increased-25-percent-2023>

VII. Contact Information

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