ENVIRONMENTAL SANITATION PROGRAM

Environmental Health

- WHO
- Aspects in human health determined by environmental factors: Physical, chemical, biological, and social/psychosocial.

EO 489 / Inter-Agency Committee on Environmental Health (IACEH):

- **Chairperson**: Secretary of the Department of Health (DOH).
- **Vice Chair**: Secretary of the Department of Environment and Natural Resources (DENR).
- **Task**: Coordinate, monitor, and evaluate environmental health programs and health promotion.

National Environmental Health Action Plan (NEHAP) 7 Components (SWATOFS):

1. Solid waste
2. Water
3. Air
4. Toxic and;
5. hazardous waste
6. Occupational health
7. Food safety

Household w/ Access to Improved/Safe Water Supply

Sanitation-Related Diseases:

1. Diarrhea
2. Intestinal parasitism
3. Schistosomiasis
4. Malaria
5. Infectious hepatitis
6. Filariasis
7. DHF (Dengue Hemorrhagic Fever)
8. TB
9. Pneumonia

Legal Basis of Sanitation:

- PD 856 Comprehensive Sanitation Code of the Philippines
- Ecological Solid Waste Management Act of 2000 (Republict Act No. 9003)
  - Yellow (Hazardous/Infectious)
  - Blue/Red (Recyclable) - plastics
  - Green (Biodegradable/Compostable)
  - Black (Non-biodegradable/Residual) - electronics
- RA 6969 (Toxic Substances and Hazardous and Nucler Wastes Control Act)

Safe Water Sources

- **Level I (Point Source)**:
  - For rural, thinly scattered houses (15–25 families)
  - Yields 40–140 liters/day, with the farthest source not more than 250 meters away.
  - Includes protected well/deep well/shallow well, improved dug well, developed spring, and rainwater cistern (w/outlet and no distribution network)
- **Level II (Communal Faucet or Stand-Posts)**:
  - For rural areas with densely clustered houses (1 faucet per 4–6 households, not more than 25 meters away).
  - Provides 40 to 80 liters of water/day via a source, reservoir, piped distribution network, and communal faucet.
- **Level III (Waterworks System or Individual Connections)**:
  - For urban, densely populated areas. Features a source, reservoir, piped distribution network, household taps, and minimum disinfection.

Unapproved Water Facilities:

Doubtful sources include open dug wells, unimproved springs, and wells that need priming.

Water Quality & Monitoring:

- Standards set yearly by the DOH via DOH-accredited laboratories, leading to a "Certification of Potability" by the DOH or its representative LGU.
- Disinfection:
  - Newly constructed water supply
  - Repaired
  - (+) bacteria
  - Container disinfection (unimproved)

Proper Excreta & Sewage Disposal Program

Approved Types of Toilet Facilities:

- **Level 1**: Non-water carriage toilet facility (e.g., pit latrines/pit privy).
- **Level 2**: Toilet facilities of water carriage type (water-sealed, flush types with septic vault disposal facilities).
- **Level 3**: Water carriage types of toilet facilities connected to septic tanks or a treatment plant.

Note:

- **Households with Sanitary Toilet**: Must be equipped with an approved type of toilet facility.
- **Household with Complete Basic Sanitation Facilities**: Must possess all three of the following:
  1. Safe water
  2. Sanitary toilet
  3. System of garbage disposal

Unsafe Practices: Pail systems, box-and-can systems, bucket latrines, and overhung latrines (constructed over a body of water).

Safety Distance: Privies/pits must be located at a safe distance (at least 25 meters) away from water sources to prevent contamination.

Food Safety

- Land-based and sea-craft establishments require a Sanitary Permit.
- Food handlers must display a Health Certificate on the upper left portion of their garment and must be free from boils, infected wounds, or gastrointestinal/respiratory infections.

4 Rights to Food Safety:

- Right Source: Fresh.
- Right Preparation: Separate raw and cooked foods; wash hands, vegetables, and pasteurize items.
- Right Cooking: Cook at 70°C
- Right Storage: Room temperature not more than 2 hours, hot environments above 60°C, and cold storage below or equal to 10°C.

Golden Rule: "When in DOUBT, THROW it out"

Vermin & Vector Control

- **Vermin**: A group of insects or small animals (such as flies, mosquitoes, cockroaches, fleas, lice, bedbugs, mice, and rats) that act as vectors of disease.
- **Insects**: Flies, mosquitoes, cockroaches, bedbugs, fleas, lice, ticks, ants, or other arthropods.
- **Pest**: A destructive or unwanted insect or other small animal (such as rats and mice) that causes annoyance, discomfort, nuisance, disease transmission, or structural damage.
- **Rodent**: Small mammals (such as rats and mice) characterized by constantly growing incisor teeth used for gnawing or nibbling.
- **Vector**: Any organism that transmits infection by:
  - Inoculation into the skin or mucous membranes via biting.
  - Depositing infective materials on skin, food, or other objects.
  - Biological reproduction within the organism.

PD 856 Code of Sanitation Phils.

The Code of Sanitation outlines several methods for controlling pests and vectors:

- **Mechanical or Physical Control**:
  - Rodent traps, fly traps, and mosquito traps.
  - Ultraviolet light and air curtains.
- **Biological & Genetic Control**:
  - Use of living predators (e.g., fish that eat mosquito larvae), parasites, and natural enemies.
  - Targets and kills larvae using non-pollutant methods.
- **Chemical Control**: Use of insecticides, rodenticides, pesticides, and larvicides.
- **Naturalistic Control**: Utilizing elements of nature (e.g., Neem trees).
- **Environmental Sanitation Control**: Regular clean-up drives. Proper construction and design of dwellings.
- **Integrated Control**: Combining different methods (integrated pest management) for comprehensive control.

CHN CONCEPT AND HOME VISIT BAG TECHNIQUE

Botika sa Barangay/Barrio

- Approved by the National Drug Policy - Pharmaceutical Management Unit 50
- Licensed by BFAD (Bureau of Food and Drugs)
- **Content**: Home remedies and low-priced Over-The-Counter (OTC) drugs.
- **Objective**: Equity in health.

Home Visit

- A face-to-face contact made by a nurse to the patient or family for necessary health care activities.

Principles in Planning:

- **Vital Needs**: Address immediate or essential needs.
- **Info**: Base the visit on adequate information.
- **Sense**: Focus on what makes practical sense.
- **Involve Family**: Engage the family in the process.
- **Tractable / Flexible / Practical**: Plans should be adaptable to the situation.

The Public Health Bag (PHB)

- An essential and indispensable piece of equipment for a Public Health Nurse (PHN) to carry along during home visits.
- Contains basic medications and articles necessary for giving care (Note: Blood pressure apparatus and stethoscope are carried separately).

Bag Technique

- A tool used by a nurse during a visit.

Purpose:

- Perform nursing procedures with ease and deftness.
- Save time and effort.
- Render effective nursing care.
- Minimize or prevent the spread of infection.
- Show the effectiveness of total care given to an individual or family.
- Performed depending on agency policy and the home situation.

Important Points to Consider in Using the Bag

1. The bag should contain all necessary articles, supplies, and equipment for emergency needs.
2. Content should be arranged in a way that is most convenient to the user to avoid confusion and promote efficiency.
3. The bag and its contents should be cleaned, and supplies replaced regularly.
4. **Protection and Infection Control**:
   - The bag and its contents should be well-protected from contact with articles in the patient's home.
   - **Rule of Thumb**: Consider the bag and its contents as clean and sterile, while articles belonging to the patient are considered dirty and contaminated.
   - Use protective barriers like paper/plastic linings and aprons.

Bag Technique Procedures (Placing Linings & Apron)

- **Paper Lining**:
  - Placement: Place the bag on a table lined with clean paper.
  - Orientation: The clean side must be out, and the folded part must touch the table.
- **Apron Usage**:
  - Putting on: Take the apron out of the bag and put it on with the right side out.
  - Removal: Fold it away from the nurse so that the soiled side is inside (IN) and the clean side is outside (OUT).

Infection Control & Prevention Protocols

- **Bag Handling**: Take all needed materials, then close the bag (opened twice) and place it in one corner of the working area.
- **Client Sequencing** (Within Family): Always attend to clients from cleanest to highest risk:
  - First client: Well / Healthy members.
  - Last patient: Sick members.
- **Handwashing**: Performed at minimum and maximum required intervals for both the nurse and family.
- **Waste Disposal** (Paper Waste Basket):
  - Normally: Disposed of (D).
  - Once contaminated: Burned (B)/Discarded safely according to protocol.

Urine Diagnostics

Benedict's Test (Testing for Glucose/Glucosuria):

- **Specimen**: Midstream catch urine.
- **Procedure**: Place 5ml of Benedict's solution in a test tube and pre-heat ➔ add 8-10 drops of urine ➔ pre-heat again
- Color Reactions & Results:
- Blue: Negative (-) / No reaction
- Green: (+1)
- Yellow: (+2)
- Orange: (+3)
- Red: (+4)

Acetic Acid Test (Test for Protein/Proteinuria):

- **Specimen**: Midstream catch urine.
- **Procedure**: Divide the test tube into 3 parts ➔ fill 2/3 of the test tube with urine and pre-heat ➔ add 1/3 of acetic acid and pre-heat
- **Positive Result**: Formation of precipitates and a cloudy appearance.

FAMILY HEALTH NURSING

Definitions of Family:

- **National Statistical Coordination Board**: A group of persons usually living together and composed of a head by blood, marriage, or adoption.
- **Sociological & Choice-based Perspectives (Johnson & Allen)**: Defined as a social group interacting with the larger society and connected through birth, marriage, adoption, or personal choice.
- **Friedman (Non-traditional)**: Two or more persons joined by emotional closeness, sharing, and a shared identity as a family.

Family Forms

- **Nuclear**: Nuclear families consist of parents and immediate children
- **Dyad**: Consist only of a husband and wife (e.g., newlyweds or empty nesters).
- **Extended**: Involves three or more generations living together.
- **Modified Extended**: with Nuclear structure but living far apart while maintaining close emotional bonds.
- **Transnational Family**: Different family members live in at least two different countries.
- **Elderly Family**: A family consisting of spouses who are 65 years old and older.
- **Blended Family**: A union where one or both spouses bring a child or children from a previous marriage into a new living arrangement.
- **Compound Family**: A family where a man has more than one spouse, usually in a Muslim setting as approved under PD No. 1083 (Code of Muslim Personal Laws of the Philippines).
- **Cohabiting Family**: A "live-in" arrangement between an unmarried couple, also referred to as "common-law spouses".
- **Dual Career Family**: A family where both spouses are working and committed to their respective jobs.
- **Single-Parent Family**: Arises due to the death of a spouse, separation, or pregnancy out of wedlock, carrying greater social, emotional, and financial risks.
- **Gay or Lesbian Family (Not Legally Acceptable)**: Consists of a cohabitating same-sex couple in a sexual relationship who may or may not have children. Under the Family Code of the Philippines (EO 209), marriage is defined as a special contract of permanent union between a man and a woman, making same-sex marriage legally unacceptable.

Functions of the Family

- **Meeting Society's Needs** - Achieved through:
  - **Procreation** - Universally accepted institution for reproduction & child rearing
  - **Socialization** (transmitting culture and social rules
    - Process of learning how to become productive members of society
    - Involves transmission of culture
    - Family – 1st teacher about social rules
  - **Status placement**
    - Family confers its social rank on the children
    - Society is characterized by a hierarchy of its members into social classes
  - **Economic Function**
    - Rural Family – a unit of production where the whole family works as a team
    - Urban Family – economically productive members work separately to earn; if engaged in production – they serve as a units of production
  - **Educational Function**
    - Fam provides Knowledge, values for adaptation to society
    - Member learn & develop, Learn to become stronger
  - **Psychological Function**
    - CHILD GROWS in environment of love forms healthy PERSONALITY & IDENTITY >> helps overcome difficulty
- **Meeting Individual Needs**:
  - Physical maintenance - For survival needs for its dependent members (shelter, food, clothing)
  - Welfare & protection - emotional security, love, and companionship

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Family as a Client

- **Systemic Impact**: A health issue or dysfunction in one family member directly impacts all other members.
- **Critical Resource**: The family acts as an essential partner in "case finding" and improving overall health outcomes and nursing care.

Stages of Family Life Cycle

The stages a family goes through over time, from formation until dissolution, include:

- Beginning Family through **Marriage or Commitment**: Formation of identity as a couple, inclusion of spouse in relationships with extended families, and decision-making regarding parenthood.
- Families **with Young Children**: Integration of children into the family unit, adjustment of tasks (child-rearing, financial, and household), and accommodation of new parenting and

grandparenting roles.
- Families **with Adolescents**: Developing increasing autonomy for adolescents, middle reexamination of marital and career issues, and an initial shift toward concern for the older generation.
- **Launching Family** (Youngest Leaves Home): Establishment of independent identities for parents and grown children, renegotiation of the marital relationship, readjustment to include in-laws and grandchildren, and dealing with the disabilities/death of the older generation.
- **Middle-Aged Family**: The remaining marital dyad from retirement preparation through retirement.
- **Aging Family**: Maintaining couple and individual functioning while adapting to aging, supporting the middle generation, maintaining autonomy of older members, and preparing for death while dealing with the loss of spouses, siblings, or peers.

Family Assessment Tools (First-Level Assessment)

- **Family Health Tree**: A record of family medical and health history, causes of death, events, occupational diseases, psychosocial risk factors, and genetically linked diseases.
- **Genogram**: A pictorial display of a family's relationships and medical history (also known as the McGoldrick–Gerson study, Lapidus schematic, or family diagram)
- **Ecomap**: A graphical representation aimed at mapping and understanding personal and social connections, depicting linkages with the suprasystem (e.g., work, school, church, friends, physician, social services).
    - **Culturagram**: Used to understand the sociocultural context of a family to identify appropriate nursing interventions.
- **Family Interviewing**
    - Family assessment tools are available.
      e.g. Initial Data Base (FSPR)
      MEDIUM for providing INTERVENTION.
    - Refer if beyond, nurse level of preparation.
    - 15 mins

  5 Elements of Interviewing
    1. **Manner**: Setting the tone through common social behavior and respecting family rights.
    2. **Therapeutic Questions**: Exploring the context of family concerns, challenges, and needs.
    3. **Therapeutic Conversation**: Focused, planned dialogue that engages the family's potential to heal.
    4. **Genogram & Ecomap**: Utilizing structural diagrams as an efficient way to gather information.
    5. **Commend Family or Individual Strengths**: Identifying at least two strength areas to build rapport and resilience.

- **Initial Data Base (IDB/FSPR)**: Structured forms used to gather baseline demographic, structural, and environmental data about the family unit.

Data Collection covers:
- Family Structure
- Socio-Economic status
- Health condition
- Home / Environment
- Health Promotion

Data Analysis involves:
- Comparing data with standards across health conditions, home/immediate environment, and family characteristic development

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Nursing Assessment Phase

Health Problem:
- A situation or condition that interferes with the promotion and/or maintenance of health and recovery from illness or injury.
- It becomes a nursing problem when it can be modified through nursing interventions.

Typology of Nursing Problem:
- Refers to "the study or systematic classification of types".
- Acts as "a tool or classification of a family nursing problems that reflects the family status and capabilities as a functioning unit".

Health Need:
- Exist when there is a health problem that can be alleviated with medical or social technology.

First-Level Assessment Classifications:

a. **Wellness Condition**: A clinical or nursing judgment about a client in transition to a higher level of wellness (e.g., potential for enhanced capability for a healthy lifestyle).

b. **Health Threats**: Conditions that are not conducive to health and increase the risk of disease, accident, or failure to realize health potential (e.g., family history of asthma).

c. **Health Deficits**: Instances of failure in health maintenance, such as disease, disability, or developmental lag (e.g., pulmonary tuberculosis).

d. **Stress Points/Foreseeable Crisis Situations**: Anticipated periods of unusual demand on family resources (e.g., a fifth pregnancy for an unemployed couple).

Priority Setting Considerations: When determining which problem is a priority, nurses evaluate the type of health problem, its modifiability/solution potential, preventive potential (preventing future problems), and the significance/urgency to the family.

Nursing Planning Phase

When ranking family health problems according to priorities, four main criteria are used:

1. **Nature of Condition or Problem**: Categorized into wellness state/potential, health threat, health deficit, or foreseeable crisis.
2. **Modifiability of the Problem**: Refers to the probability of success in minimizing, alleviating, or totally eradicating the problem through nursing intervention.
3. **Preventive Potential**: Refers to the nature and magnitude of future problems that can be minimized or totally prevented if intervention is done on the current problem.

4. **Salience**: Refers to the family's perception and evaluation of the problem in terms of seriousness and the urgency of attention needed.

Priority Guidelines: Focuses first on:
- Family safety (life-threatening situations), followed by;
- Family perception (what the family recognizes as most urgent);
- Practicality (resource constraints and competence), and;
- Projected effects (swift resolution builds a sense of accomplishment and confidence).

Family Health Tasks
Family health tasks define what a family is expected to manage regarding health and development:

Maglayag's Framework:
1. Recognize the presence of wellness state, health condition, or problem.
2. Make decisions about taking appropriate health action to maintain wellness or manage the problem.
3. Provide nursing care to the sick, disabled, dependent, or at-risk member.
4. Maintain a home environment conducive to health maintenance and personal development.
5. Utilize community resources.

Sumile:
1. Recognize interruption in health or development
2. Seeking health care
3. Managing health and non-health crises
4. Providing health care to sick, disabled, or dependent members of the family
5. Maintaining a house environment conducive to good health and personal development
6. Maintaining a reciprocal relationship with the community and health institutions

Freeman & Heinrich (1981):
1. Recognize interruptions of health or development
2. Provide nursing care
3. Maintain a home environment (which should have an atmosphere of security and comfort for psychosocial development)
4. Establish reciprocal relationships with community and health institutions
5. Seek health care
6. Manage health and non-healthy crises

Second-Level Assessment:
Expressed as an inability to:

- Decide
- Care
- Recognize health problems
- Maintain health and environment
- Use health resources

Family Coping Index
- Acts as a Likert scale system to identify areas requiring nursing intervention and highlight family strengths by evaluating coping patterns.
- Alternative nursing diagnosis

9 Areas of Assessment:
1. Physical independence
2. Therapeutic competence
3. Knowledge of health condition
4. Application of principles of personal and general hygiene
5. Health care attitudes
6. Emotional competence
7. Family living patterns
8. Physical environment
9. Use of community facilities

Nursing Interventions and Evaluation

Principles of Planning
Must follow the:
- Principle of Mutuality (giving the family an opportunity to decide)
- Principle of Personalization (fitting the family's needs, style, and functioning)
- Coordination (maximizing resources and preventing duplication)

3 Types of Nursing Interventions (Freeman & Heinrich):
1. Supplemental Intervention: The nurse performs actions on behalf of the family.
2. Facilitative Intervention: Actions that remove barriers to health action.
3. Developmental Interventions: Actions that improve the family's capacity to provide for its own needs.

Aspects of Evaluation
Focuses on:
- **Effectiveness** (were goals/objectives attained?)
- **Appropriateness** (were goals and interventions suitable for the identified needs?)
- **Adequacy** (were they sufficient?)
- **Efficiency** (was it worth the time, effort, and resources?)