

# CIVIL REGISTRATION AND VITAL STATISTICS FOR HEALTH

By

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# Philippine Health Agenda:ACHIEVE

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Invest in eHealth and data for decision-making



1. **Require online data\* submission as requirement for licensing & contracting of health facilities and drug outlets**
2. **Mandate the use of Electronic Medical Records (EMR) in all health facilities**
3. **Invest in nation-wide surveys, administrative data and disease registries and support efforts to improve local civil registration and vital statistics**
4. **Automate major business processes**
5. **Facilitate open access to anonymized data**

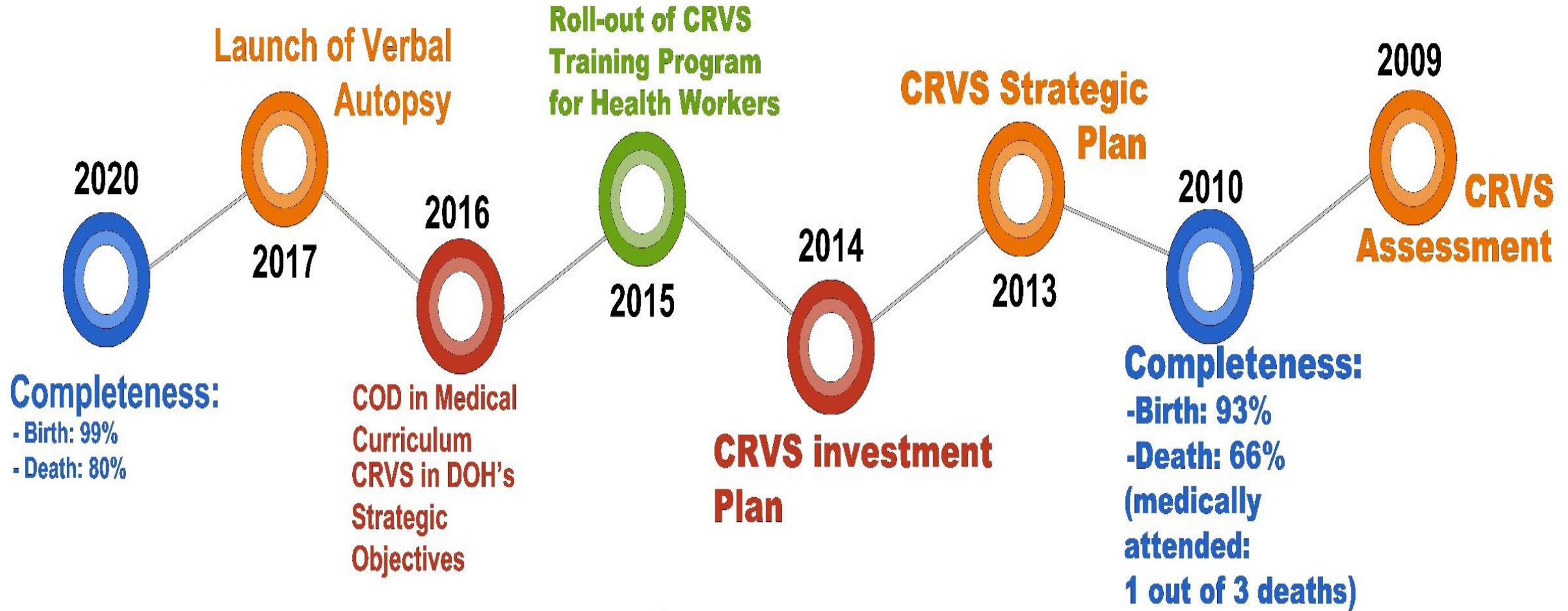
*\* clinical and administrative*



# CRVS JOURNEY



# CRVS in the Philippines



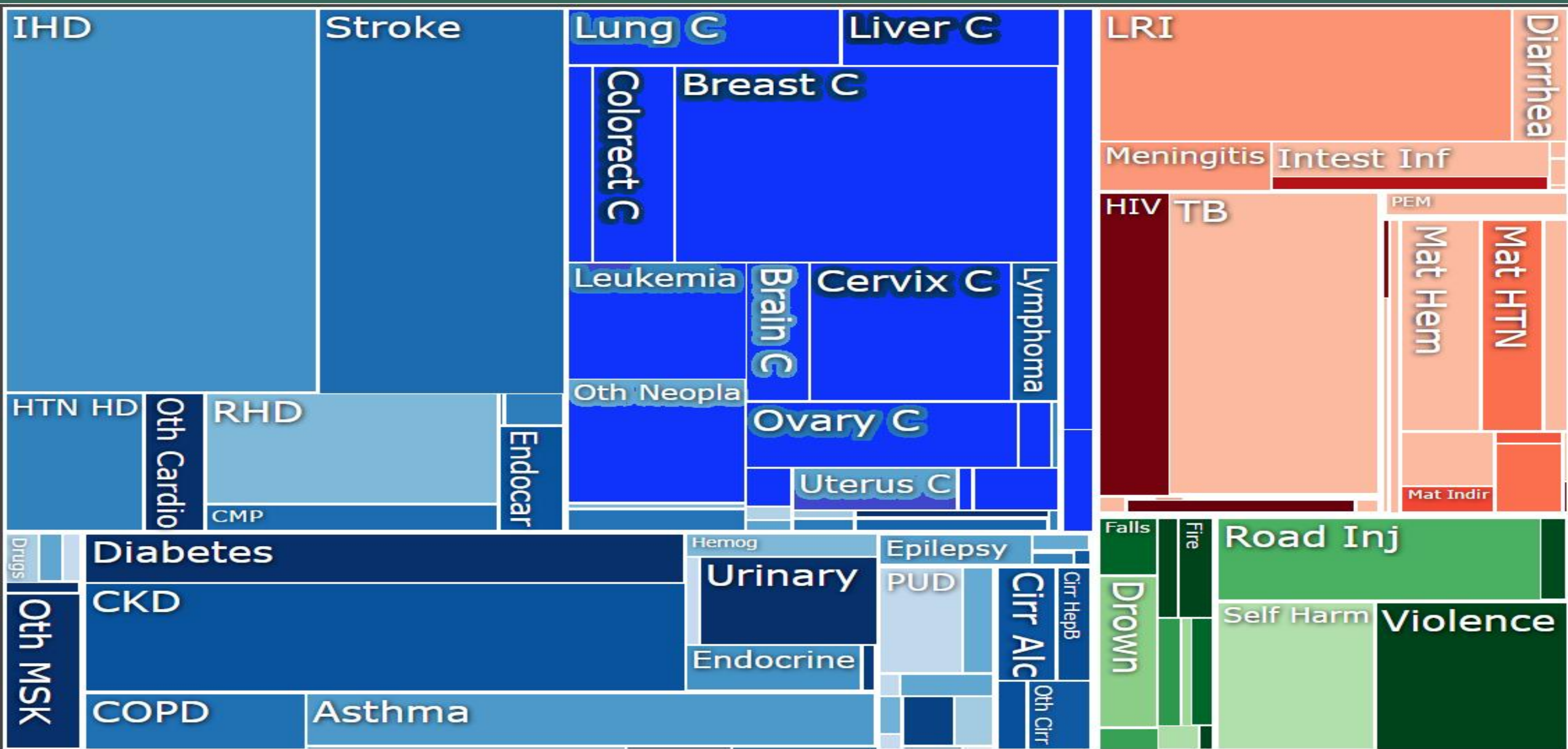
Republic of the Philippines  
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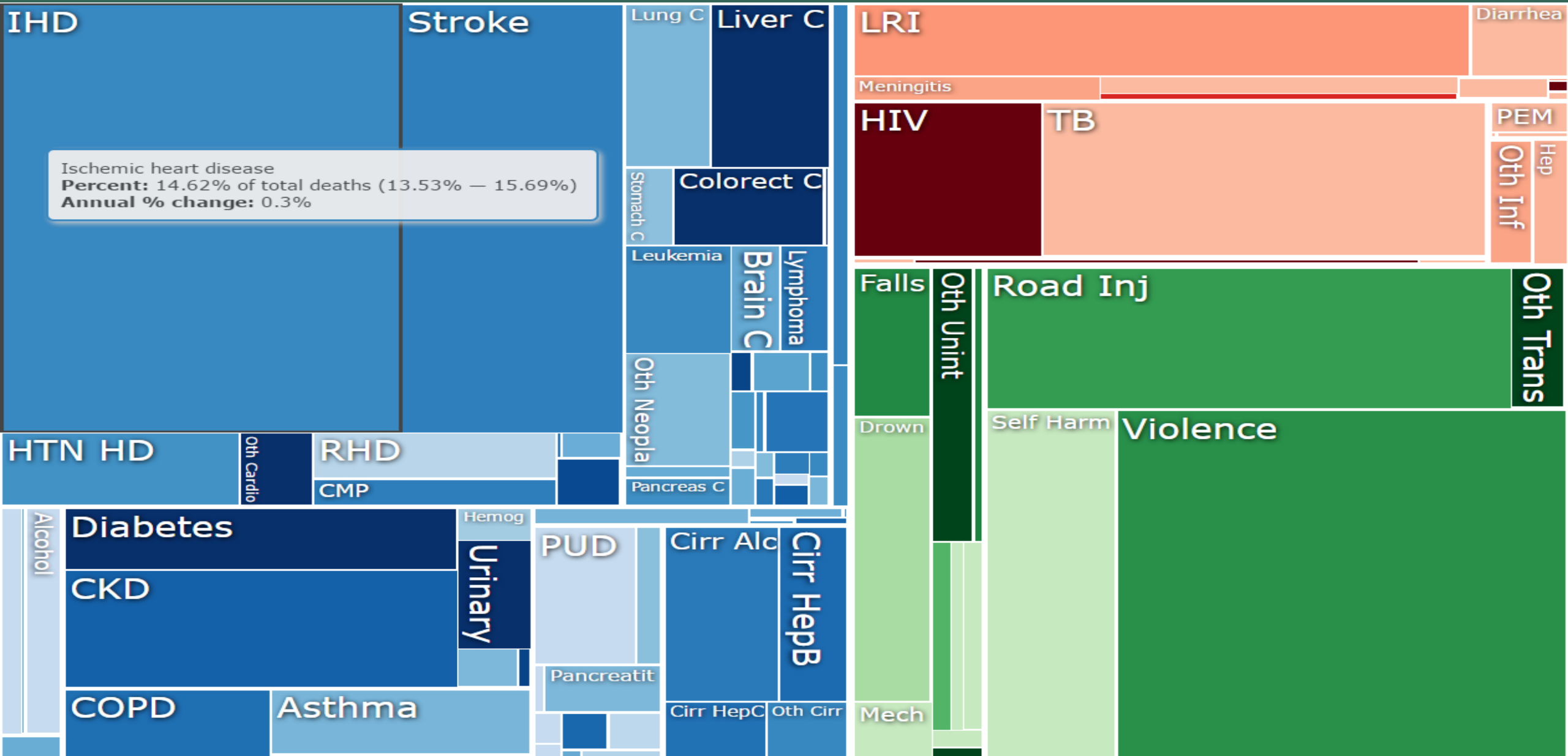
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# What is the Leading Cause of Premature Death in the Philippines (age 15-49)?

# LEADING CAUSE OF DEATH, 15-49 FEMALES PREMATURE DEATHS, 2015



# LEADING CAUSES OF DEATH MALES 15-49, PHILIPPINES, 2015



# IMPORTANCE OF VITAL STATISTICS FOR HEALTH SECTOR

- Primary source of public health information on **births and causes of infant, neonatal and maternal deaths** in a defined population
  1. Data on **prevalence** and **distribution of mortality by cause**
  2. Identification of **health inequalities**
  3. Resource allocation
  4. Assessment of health systems performance
  5. Understanding emerging health challenges
- It is the **Gold Standard** of Health Information!



# PROBLEMS IN CRVS

- Data is not readily available

## ❖ **Low quality of data**

- Lack of investments in CRVS
- Low emphasis on death certification
- Little use made of the data

# MOST COMMON ERRORS WITH CAUSE OF DEATH DATA

- **Errors in certification of causes of death**
- Ill-defined condition entered as underlying cause of death or as main disease/condition of fetus
- Multiple causes per line
- Incorrect/clinically improbable sequence of events leading to death
- Interval between onset to death not shown
- Abbreviations used in certifying death
- Illegible Handwriting
- Erasures
- Leaving blanks between lines in part 1



# DOH

launched the

**Medical Certification of Death Training  
Program**



# **STATISTICS ON COD TRAINING COURSES CONDUCTED**



Region	No. of MHOs/CHOs Trained	No. of Municipalities & Cities
National Capital Region (NCR)	40	17
Region I (Ilocos)	85	125
Region II (Cagayan)	2	93
Region III (Central Luzon)	2	130
Region IV-A (CALABARZON)	0	142
Region IV-B (MIMAROPA)	0	73
Region V (Bicol Region)	37	114
Region VI (Western Visayas)	87	101
Region VII (Central Visayas)	16	107
Region VIII (Eastern Visayas)	53	143
Region IX (Zamboanga Peninsula)	14	72
Region X (Northern Mindanao)	5	93
Region XI (Davao Region)	30	49
Region XII (Soccsksargen)	6	50
Region XIII (Caraga)	6	73
Region XIV (Cordillera Administrative Region)	22	77
Region XV (Autonomous Region in Muslim Mindanao)	11	118
Region XVIII (Negros Island Region)	36	57
<b>Grand Total</b>	<b>452</b>	<b>1634</b>



**Ang tanong....  
May bisa ba ang  
COD training?**

# ASSESSMENT OF THE COD TRAINING

- 898 doctors trained in **2014-2015** were part of the assessment. They had complete pre- and post-test results.
- 4,200 death certificates certified by the participating doctors were retrieved from the Philippine Statistics Authority
- 2,100 death certificates were pre-training and 2,100 were post-training

# SEVEN CRITERIA USED IN THE COD ASSESSMENT

1. Multiple causes per line
2. Blank interval between onset and death
3. Blank lines within the sequence of events
4. Abbreviations
5. Illegible handwriting
6. Clinically improbable sequence of events
7. Ill-defined conditions
  - 7.1. Impossible cause
  - 7.2. Intermediate cause
  - 7.3. Immediate cause/mode of dying
  - 7.4. Insufficiently specified cause



# MEDICAL CERTIFICATE

(For ages 0 to 7 days, accomplish items 14-19a at the back)

19b. CAUSES OF DEATH (If the deceased is aged 8 days and over)

Interval Between Onset and Death

- I. Immediate cause : a. **Cardiopulmonary Arrest secondary to Multiple Organ Failure;**  
**Hypoxic Encephalopathy status post Cardiopulmonary Arrest**
- Antecedent cause : b. **secondary to Acute Respiratory Failure secondary to Status**  
**Asthmaticus; Hospital Acquired Pneumonia; Sacral Decubitus Ulcer**
- Underlying cause : c. **Grade 4; Diabetes Mellitus Controlled; status post Tracheostomy**
- II. Other significant conditions contributing to death: **Secondary to prolonged mechanical ventilation; Status**  
**post wound debridement; Hypotension**  
**Ischemic Encephalopathy**

19c. MATERNAL CONDITION (If the deceased is female aged 15-49 years old)

- a. pregnant, not in labour
- b. pregnant, in labour
- c. less than 42 days after delivery
- d. 42 days to 1 year after delivery
- e. None of the choices

19d. DEATH BY EXTERNAL CAUSES

20. AUTOPSY



# THE RESULT OF THE ASSESSMENT

<b>TYPE OF ERROR</b>	<b>PRE- TRAINING N = 2100 (%)</b>	<b>POST- TRAINING N = 2100 (%)</b>	<b>IMPROVEMENT (%)</b>
<b>1. Multiple causes per line</b>	474 (22.6)	257 (12.2)	45.8
<b>2. Blank time interval between onset and death</b>	2053 (97.8)	1316 (62.7)	35.9
<b>3. Blank lines within the sequence of events</b>	631 (30.0)	177 (8.4)	71.9
<b>4. Use of abbreviations</b>	553 (26.3)	236 (11.2)	57.3
<b>5. Illegible handwriting</b>	414 (19.7)	373 (17.8)	9.9
<b>6. Clinically improbable sequence of events</b>	107 (5.1)	104 (5.0)	2.8
<b>7. Ill-defined conditions</b>	450 (21.4)	279 (13.3)	38.0
<b>ALL ERRORS</b>	4682 (222.9)	2742 (130.6)	41.4

# SUB-CATEGORIES FOR ILL-DEFINED CONDITIONS

(BEFORE AND AFTER THE TRAINING)

<b>ILL-DEFINED SUB-CATEGORIES</b>	<b>PRE-TRAINING N= 2100 (%)</b>	<b>POST-TRAINING N = 2100 (%)</b>	<b>IMPROVEMENT (%)</b>
<b>1. Impossible underlying causes, including signs and symptoms</b>	45 (2.1)	18 (0.9)	60.0
<b>2. Intermediate causes</b>	55 (2.6)	21 (1.0)	61.8
<b>3. Mode of dying</b>	121 (5.8)	60 (2.9)	50.4
<b>4. Unspecified causes within a larger death category</b>	226 (10.8)	177(8.4)	21.7
<b>5. Others</b>	16 (0.8)	14 (0.7)	12.5
<b>ALL ILL-DEFINED SUB-CATEGORIES</b>	463 (22.1)	290 (13.9)	37.4

# DISTRIBUTION OF CORRECTLY FILLED-OUT DEATH CERTIFICATES BY PLACE OF DEATH

<b>PLACE OF DEATH</b>	<b>PRE-TRAINING N = 2100 (%)</b>	<b>POST-TRAINING N = 2100 (%)</b>
<b>Community</b>	7 (0.3)	335 (16.0)
<b>Health facility</b>	7 (0.3)	69 (3.2)

# CASES PHYSICIANS STILL FIND DIFFICULT TO CERTIFY

CASE SCENARIOS	PUBLIC HEALTH PHYSICIANS N = 46 (%)	HOSPITAL PHYSICIANS N = 45 (%)	TOTAL N = 91 (%)
Maternal-related deaths	7 (15.2)	2 (4.4)	9 (9.9)
Elderly decent	22 (47.8)	5 (11.1)	27 (29.7)
Deaths involving external causes	14 (30.4)	8 (17.8)	22 (24.2)
Deaths involving infectious diseases	14 (30.4)	3 (6.7)	17 (18.7)
Deaths from neoplasms	10 (21.7)	2 (4.4)	12 (13.2)
Fetal deaths	13 (28.3)	4 (8.9)	17 (18.7)
Periprocedural deaths	13 (28.3)	7 (15.6)	20 (22.0)
Others	2 (4.3)	1 (2.2)	3 (3.3)
<b>ALL CASE SCENARIOS</b>	<b>95 (206.4)</b>	<b>32 (71.1)</b>	<b>127 (139.7)</b>

## CONCLUSION AND RECOMMENDATION

- Significant overall improvement in quality of death certification by the physicians involved
- COD training had a greater impact in the quality of death certification **by doctors in the community** than among those doctors based in health facility settings
- Customized COD training for hospitals and community
- Regular and systematic assessment of COD training



We need to train **all**  
**MHOs, CHOs and MOs**  
on COD.

# COD TRAINING SCHEDULE PER PROVINCE

**PROVINCE:** \_\_\_\_\_

NAME	MUNICIPALITY/ CITY	MOBILE NUMBER	PREFERRED MONTH AND WEEK	PREFERRED VENUE (CITY)



# LEGAL AND POLICY ASPECTS

- DOH will be developing policies to address the issues in medical certification of death such as but not limited to:
  - Emergency room deaths
  - Dead-on-arrival cases
  - Medico-legal cases
  - Certification by funeral parlors
  - Others .....

# LEGAL REVIEW

**PROVINCE:** \_\_\_\_\_

<b>NO.</b>	<b>ISSUES/CONCERNS</b>	<b>RECOMMENDATIONS/PROPOSED SOLUTIONS</b>

# SURVEY ON VERBAL AUTOPSY

- Purpose: Come up with a list of municipality/cities who are interested and have some capacities to use SmartVA for community deaths
- Basis for the selection of **pilot areas**
- Kindly return the accomplished survey to the DOH staff in the booth outside the hall.

# CONTACT INFORMATION

## ■ Address communications to:

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## ■ For other queries and concerns:

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