

# Natural History of Diseases

---

Asst. Prof. Wipakon Sonsnam

Collage of Nursing and Health Suan sunandha Rajaphat University

# Basic Questions to study Health Problems

---

What



Disease

Who



Person

Where



Place

When



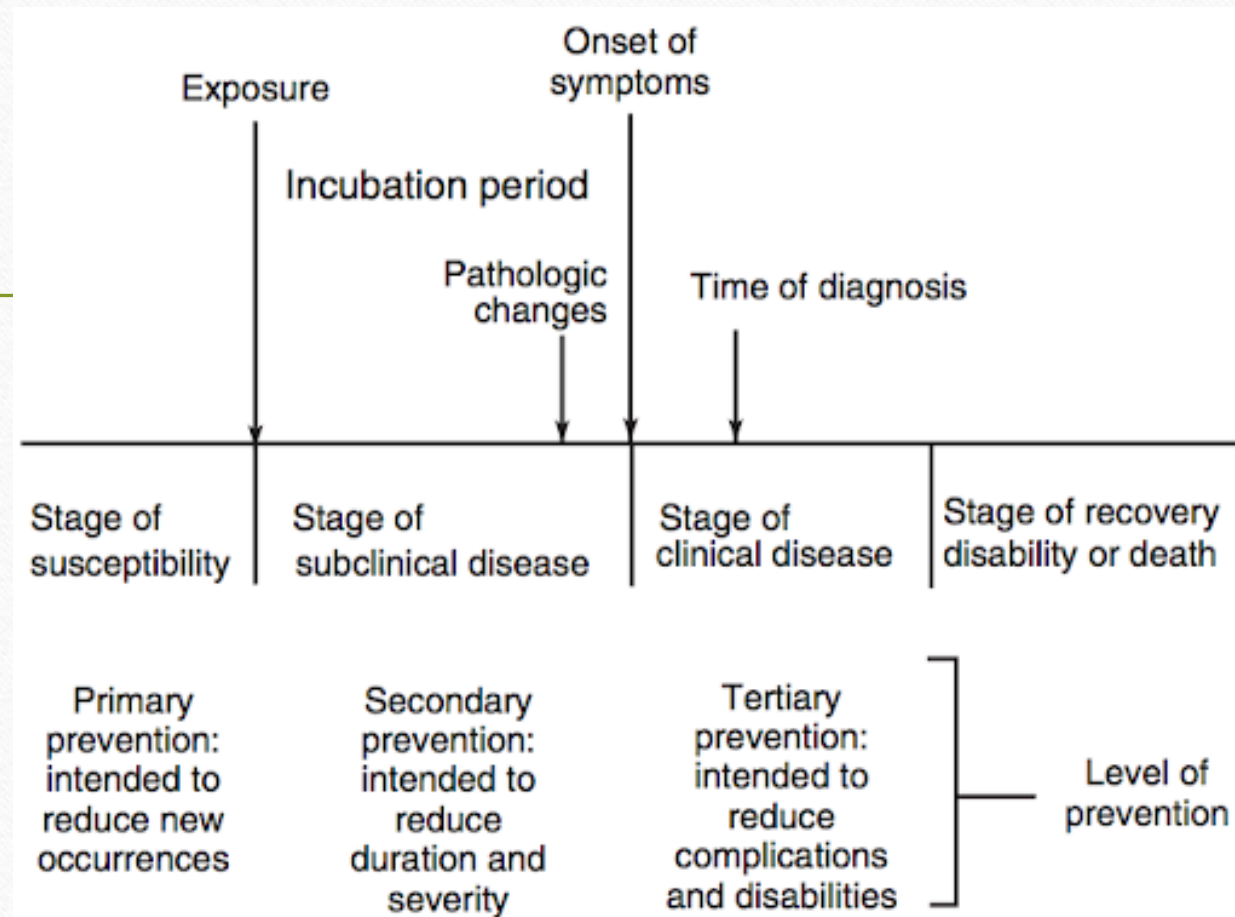
Time

Why/How



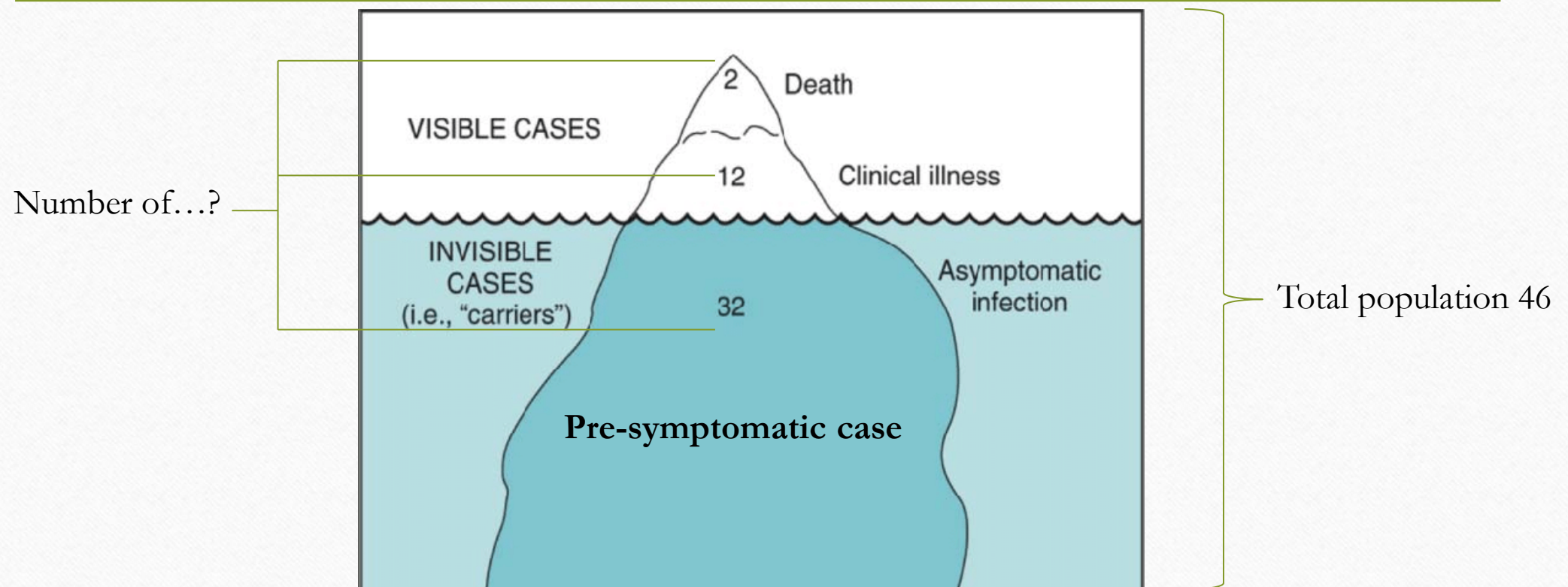
Factor/Cause



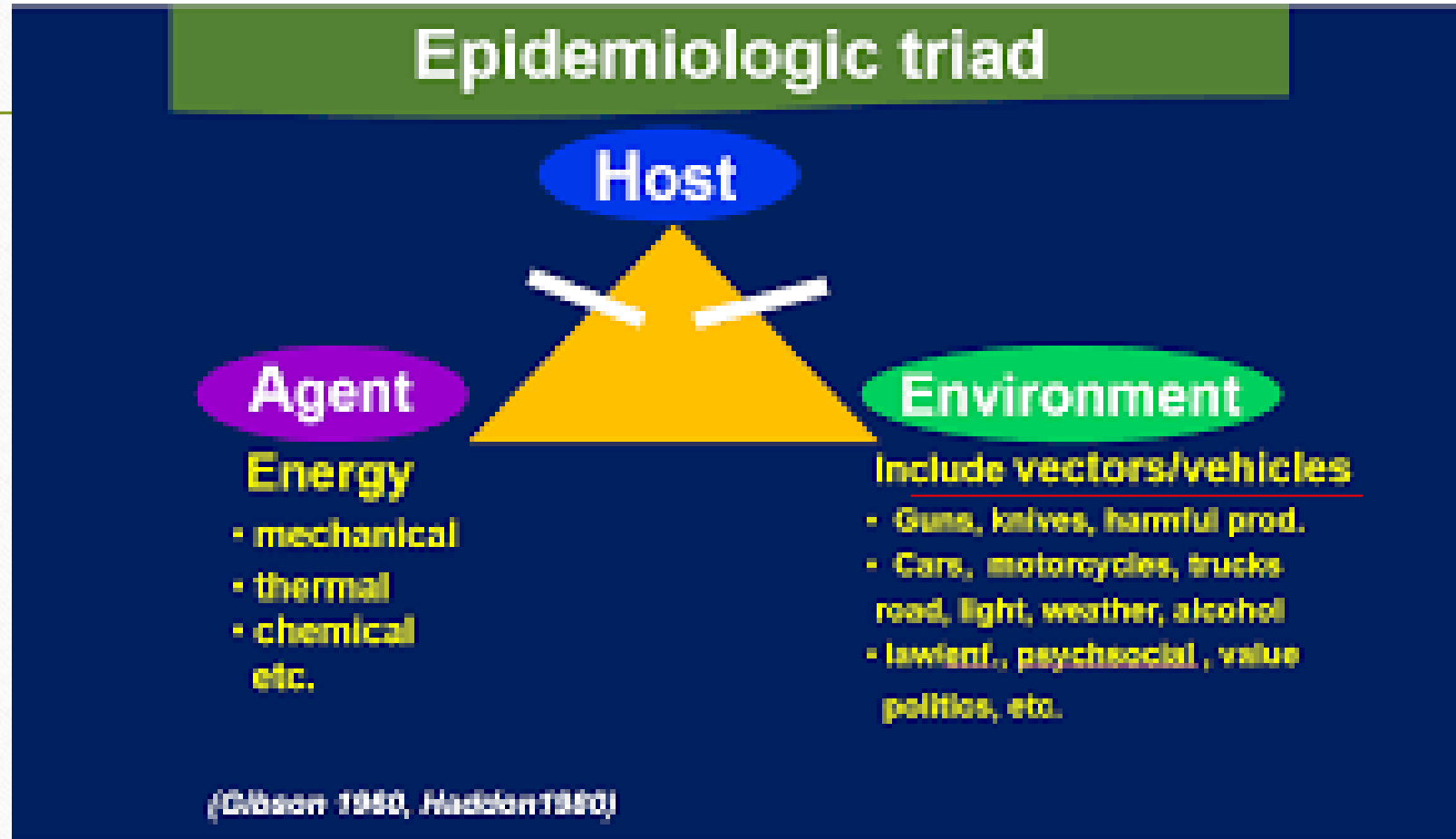


**Figure 2.1** Stages in the natural history of disease and levels of prevention.

# Tip of Iceberg phenomenon of diseases

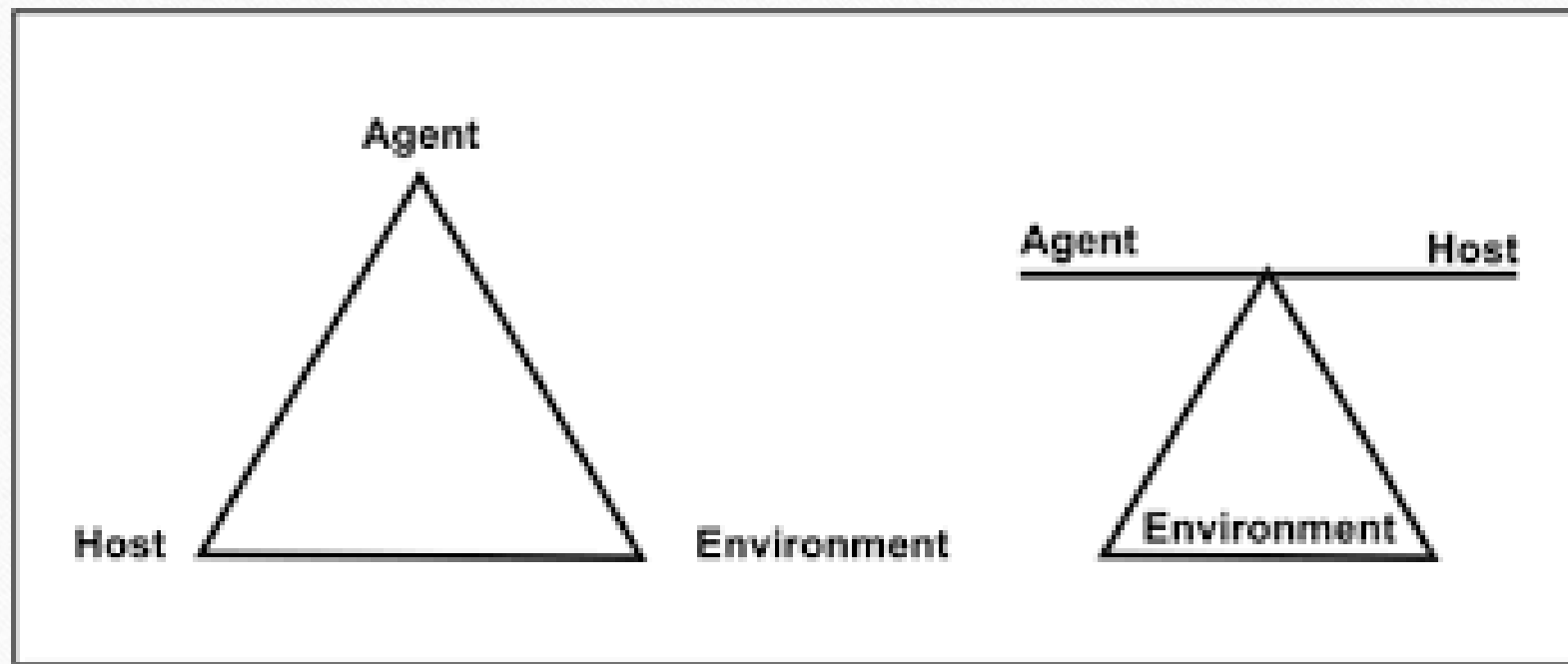


# cause of disease by John Gordon





# Balance



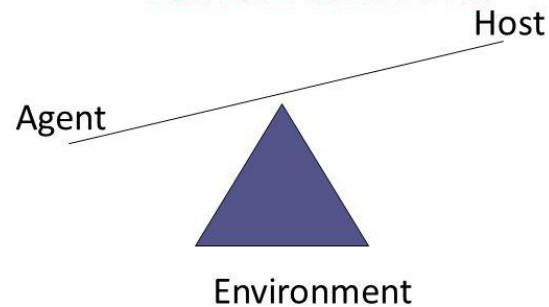
# Imbalance

---

1. Chang of Agent
2. Chang of Host
3. Chang og Environment

# Chang of Agent

**การเสียสมดุลระหว่างองค์ประกอบ  
ของการเกิดโรค**

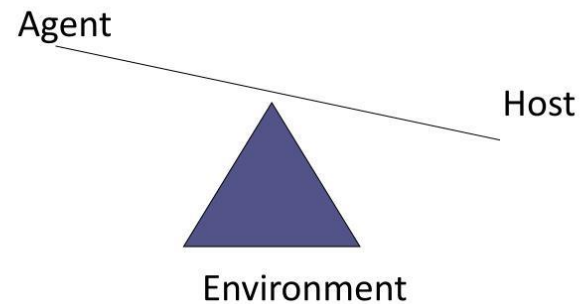


- **ความสามารถในการแพร่เชื้อของสิ่งที่ทำให้เกิดโรคเพิ่มขึ้น**



# Chang of Host

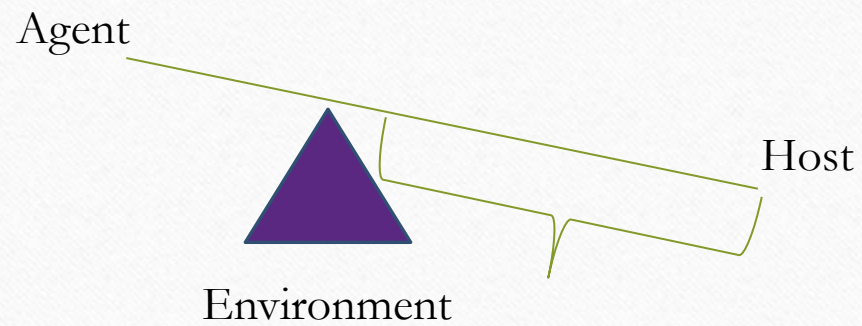
การเสียสมดุลระหว่างองค์ประกอบของการเกิดโรค



- คนที่มีความไวในการเกิดโรคเพิ่มขึ้นในประชากร เช่น คนอ่อนแอ คนที่ไม่ได้รับวัคซีน คนสูงอายุ หรือเด็กอ่อนเพิ่มขึ้น

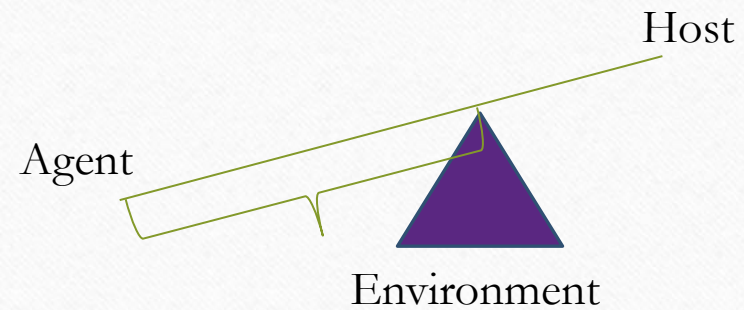
# Chang of Environment

---



# Chang of Environment

---





---

communicable diseases

## 4 Key word “Epidemic”

---

1. Endemic
2. Epidemic
3. Sporadic
4. Pandemic



# CAUSES OF COMMUNICABLE DISEASES

(Agent)

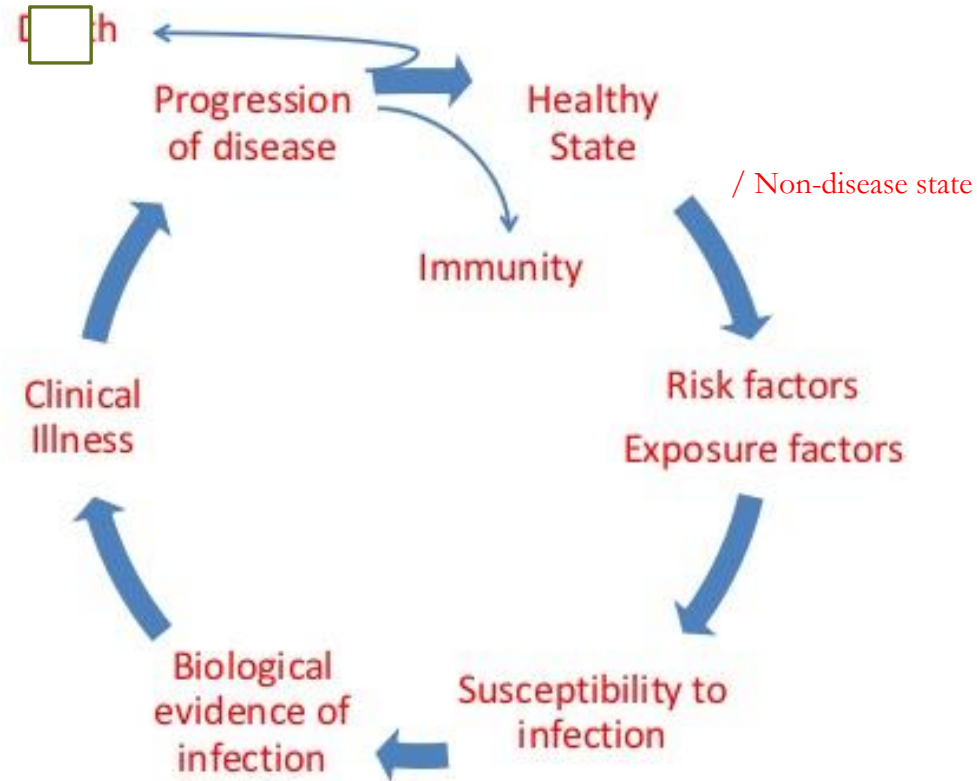
(diseases)

<u>VIRUSES</u>	<u>BACTERIA</u>	<u>FUNGI</u>	<u>PROTOZOANS</u>	<u>RICKETTSIAS</u>
<ul style="list-style-type: none"><li>•Common Cold</li><li>•Flu</li><li>•Viral Pneumonia</li><li>•Viral Hepatitis</li><li>•Polio</li><li>•Mono</li><li>•Measles</li><li>•AIDS</li><li>•Viral Meningitis</li><li>•Chicken Pox</li><li>•Herpes</li><li>•Rabies</li><li>•Small Pox</li></ul>	<ul style="list-style-type: none"><li>•Bacterial Foodborne Illness</li><li>•Strep Throat</li><li>•Tuberculosis</li><li>•Diphtheria</li><li>•Gonorrhea</li><li>•Lyme Disease</li><li>•Bacterial Pinkeye</li><li>•Bacterial Pneumonia</li><li>•Bacterial Meningitis</li></ul>	<ul style="list-style-type: none"><li>•Athlete's Foot</li><li>•Ringworm</li><li>•Vaginal Yeast Infection</li></ul>	<ul style="list-style-type: none"><li>•Malaria</li><li>•Amoebic Dysentery</li><li>•Sleeping Sickness</li></ul>	<ul style="list-style-type: none"><li>•Typhus</li><li>•Rocky Mountain Spotted Fever</li></ul>

\*Chart Found on Page 623 in your health book\*



# 1. Communicable disease cycle



## How Communicable Diseases are Transmitted:

<u>Direct Contact</u>	<u>Indirect Contact</u>	<u>Airborne Transmission</u>
<ul style="list-style-type: none"><li>•Touching</li><li>•Biting</li><li>•Kissing</li><li>•Sexual Contact</li><li>•Sneezing</li><li>•Coughing</li><li>•Pregnant Women can pass disease to unborn child through placenta</li></ul>	<ul style="list-style-type: none"><li>•Contaminated Objects</li><li>•Vectors (flies, mosquitoes, ticks)</li><li>•Water and Food</li></ul>	<ul style="list-style-type: none"><li>•Travel through the air for a long time or distance</li><li>•Don't settle quickly on surfaces</li></ul>

# Transection

---

- Inhalation
- Digestion
- Inoculation





---

Chronic Diseases have been referred to **chronic illness** and **non-communicable diseases**, and **degenerative diseases**. They are generally characterized by uncertain etiology, multiple risk factors, a long latency period, prolong course illness, noncontagious origin, functional impairment or disability and incurability (Ross C. Brownson et al, 1998)



# Communicable Dis. Vs Non-communicable Dis.

## Acute Dis. Vs Chronic Dis.

Type of diseases	Examples
Acute diseases	
communicable diseases	Pneumonia, Cholera
non-communicable diseases	Appendicitis, Poisoning, Trauma
Chronic diseases	
communicable diseases	TB, AIDS, Syphilis, Rheumatic fever
non-communicable diseases	Diabetes, Heart diseases, Osteoarthritis



# Communicable Vs Non-Communicable Diseases

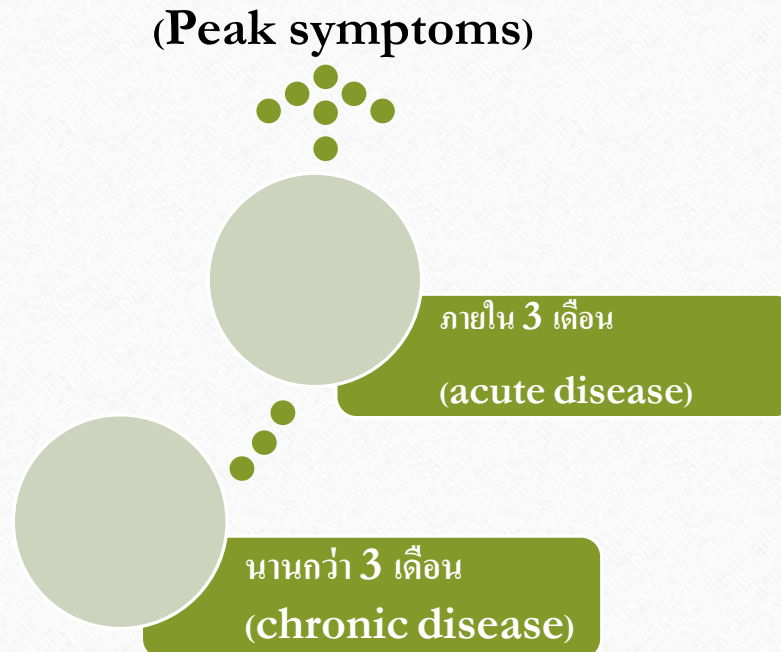
Communicable Diseases	Non-Communicable Diseases
Sudden onset	Gradual onset
Single cause	Multiple cause
Short natural history	Long natural history
Short treatment schedule	Prolonged treatment
Cure is achieved	Care predominates
Single discipline	Multidisciplinary
Short follow up	Prolonged follow up
Back to normalcy	Quality of life after treatment



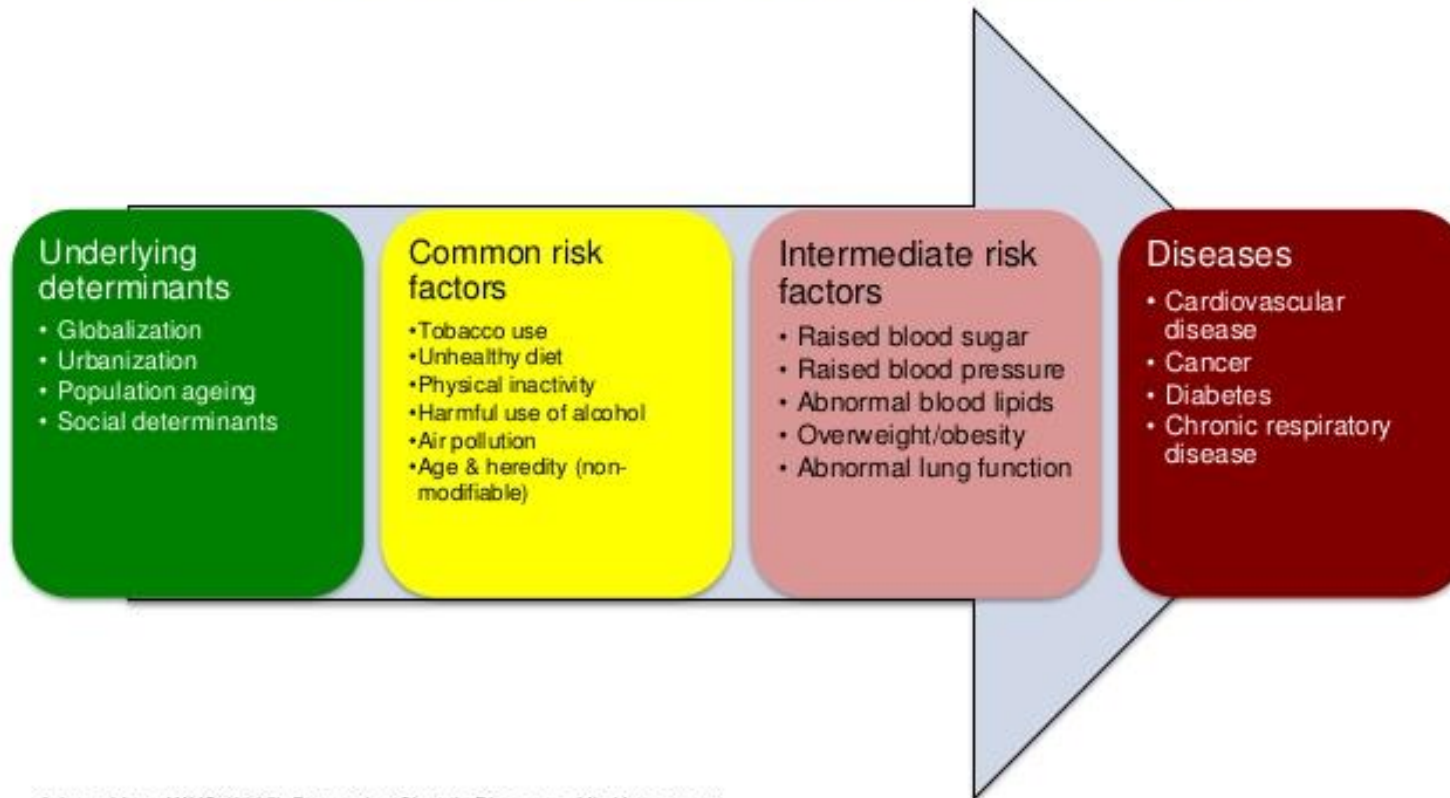


# Chronic Disease Vs Acute Disease

---



# The NCD Causation Pathway



Adapted from WHO (2005) *Preventing Chronic Disease: a Vital Investment*.

**Causes of  
causes**



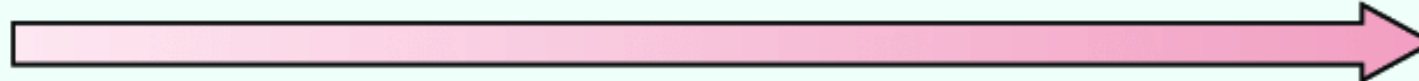
**Causes**



**NCDs**



**Deaths  
DALYs**



Development  
Poverty  
SES  
Urban  
design  
Agriculture

Tobacco  
Diet/exercise  
Salt  
Alcohol

-----

Occupational  
Environmental  
Infections  
Unknown  
causes

CVD  
Diabetes  
Cancer  
Respiratory

-----

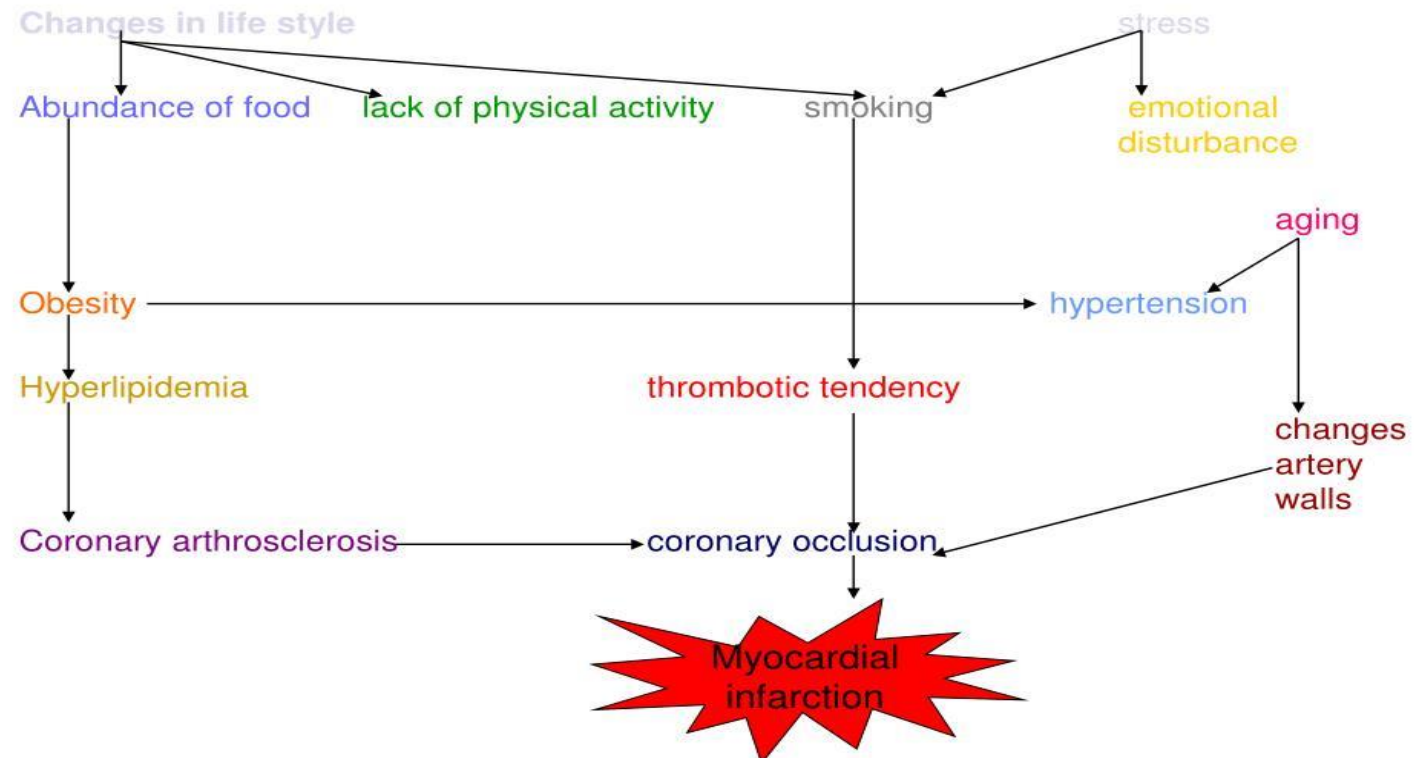
Mental  
health  
Neurological  
Musculoskeletal  
Others

Treatment/  
management  
of  
NCDs



# Gaps in the natural history of NCD

## Web of causation



---

Thank You