

การสำรวจสุขภาพประชาชนไทยโดยการตรวจร่างกาย ครั้งที่ ๕ (Thai National Health Examination Survey, NHES V)



Wichai Aekplakorn, MD., PhD
Faculty of Medicine, Ramathibodi Hospital,
Mahidol University
National Health Examination Survey Office,
Health System Research Institute



Objective

- To determine the prevalence of certain health conditions and risk factors at the country level, urban/rural areas and geographical region.

Thai National Health Examination Surveys

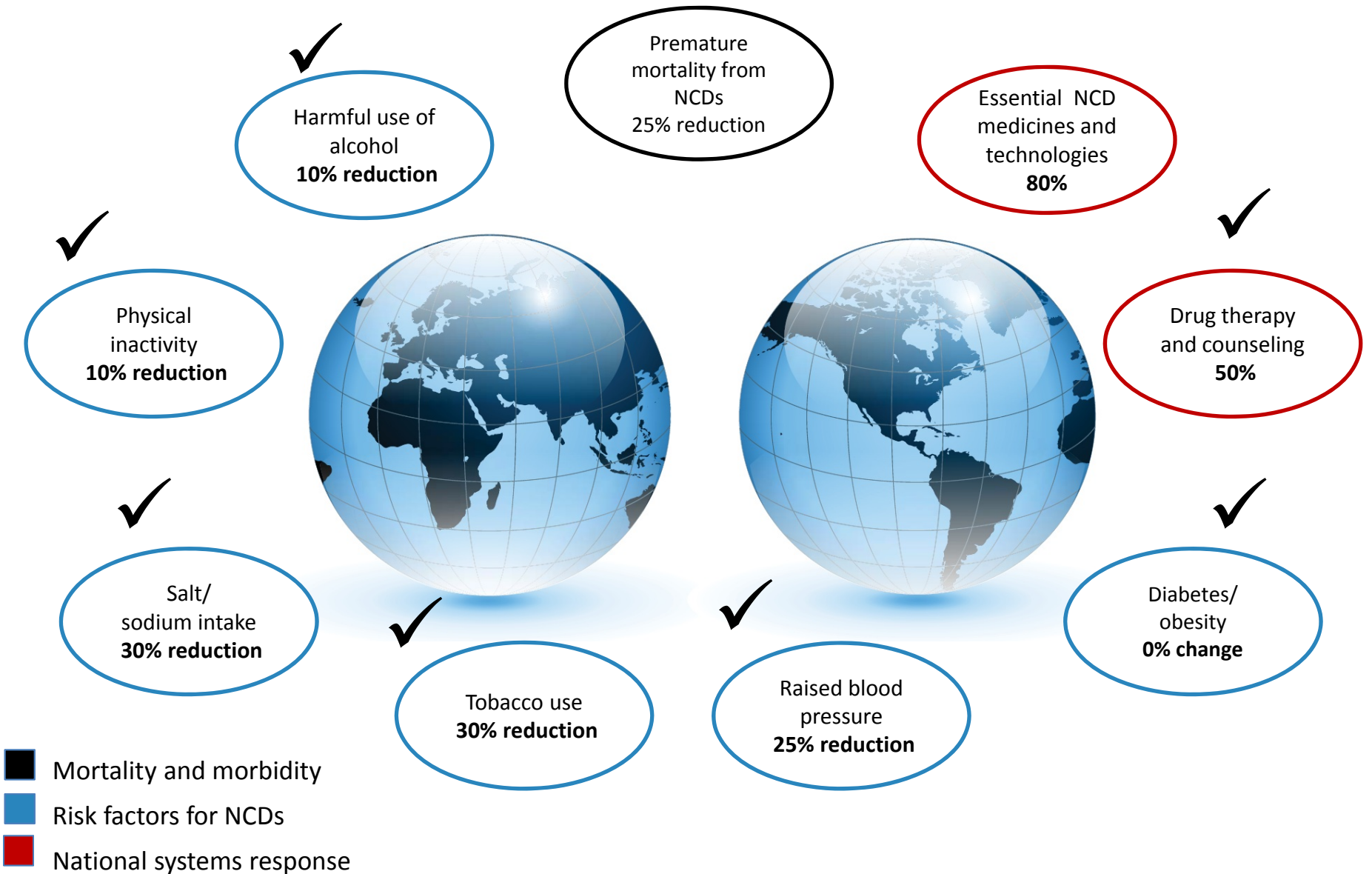
NHES	<i>Year</i>	<i>Age group</i>
NHES I	1991	1+ years
NHES II	1997	1+ years
NHES III	2004	15+ years
NHES IV	2009	1+ years
NHES V	2013	1+ years



NHES Contribution to CVD information in Thailand

- Magnitude and trends of CVD risk factors in Thai population: diabetes, HT, obesity, dyslipidemia, metabolic syndrome, renal dis, physical inactivity, inadequate fruit and veg intake etc.
- Highlight the distribution, differences by urban/rural, geographic region and SES.
- Population perspective in access to care for diabetes, HT, dyslipidemia.

Set of 9 voluntary global NCD targets for 2025



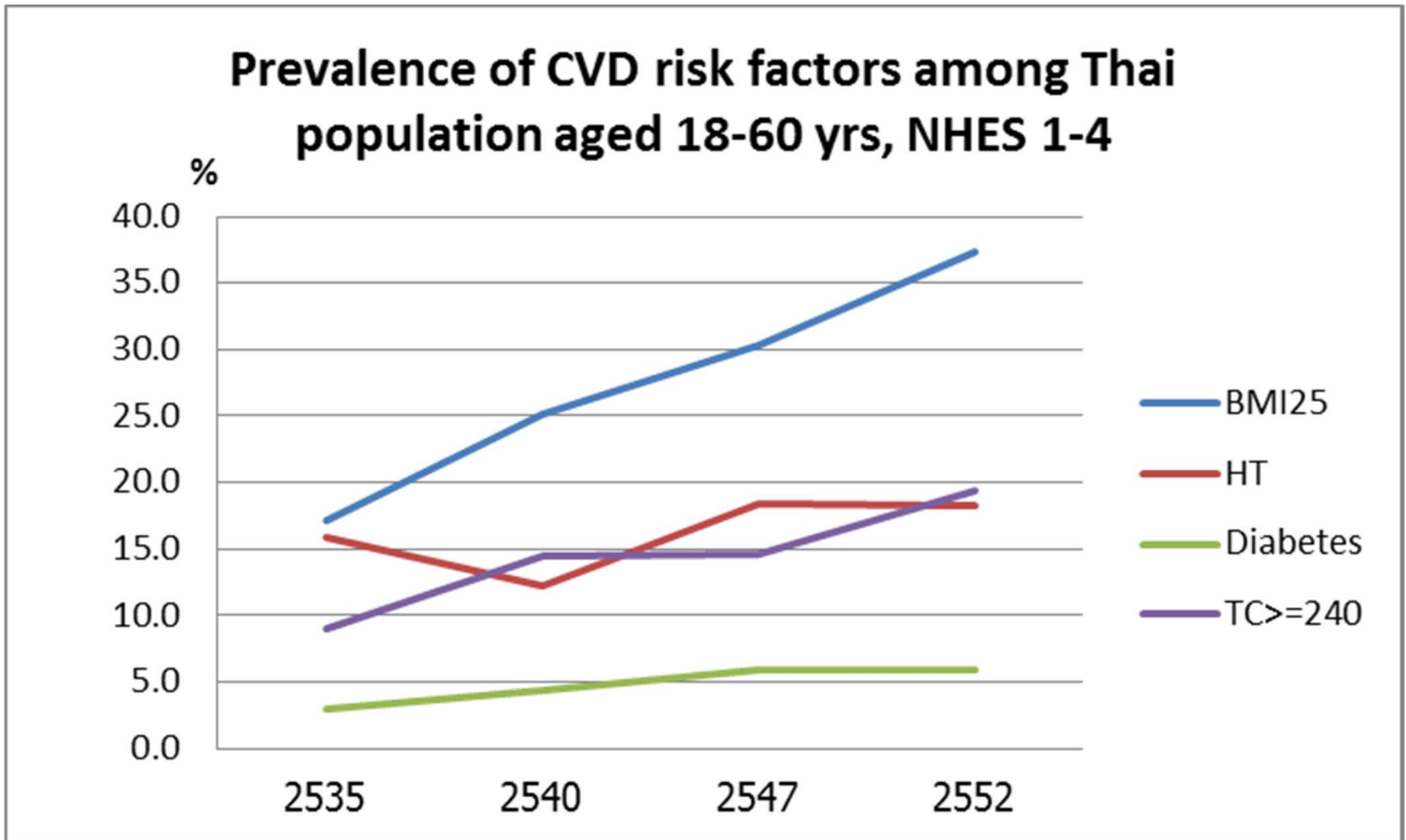
Examples of findings from NHES IV, 2009

- Overweight and obesity in Children 9%
- One third of adults: overweight and obese
- Diabetes 3.2 M, a third unrecognized
- Hypertension 10 M, a half unrecognized
- Diabetes + Hypertension 1.5 M
- 80% of Thai adults have inadequate fruits and veg intake
- Older persons 15.5% are dependent

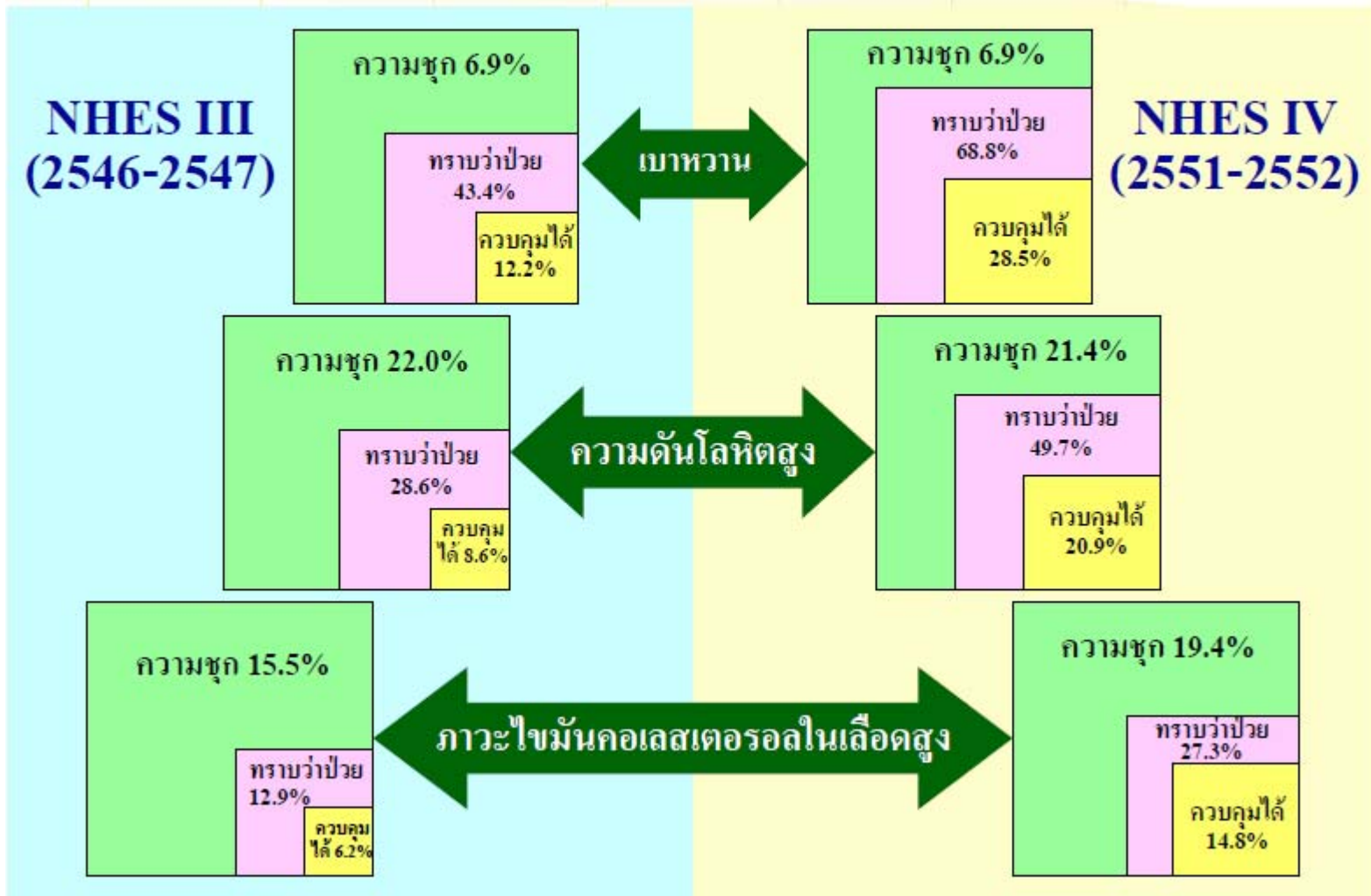


แนวโน้มปัจจัยเสี่ยงโรคหัวใจและหลอดเลือด

Thai NHES 1-4



สถานะสุขภาพประชากรไทย อายุ 15 ปีขึ้นไป



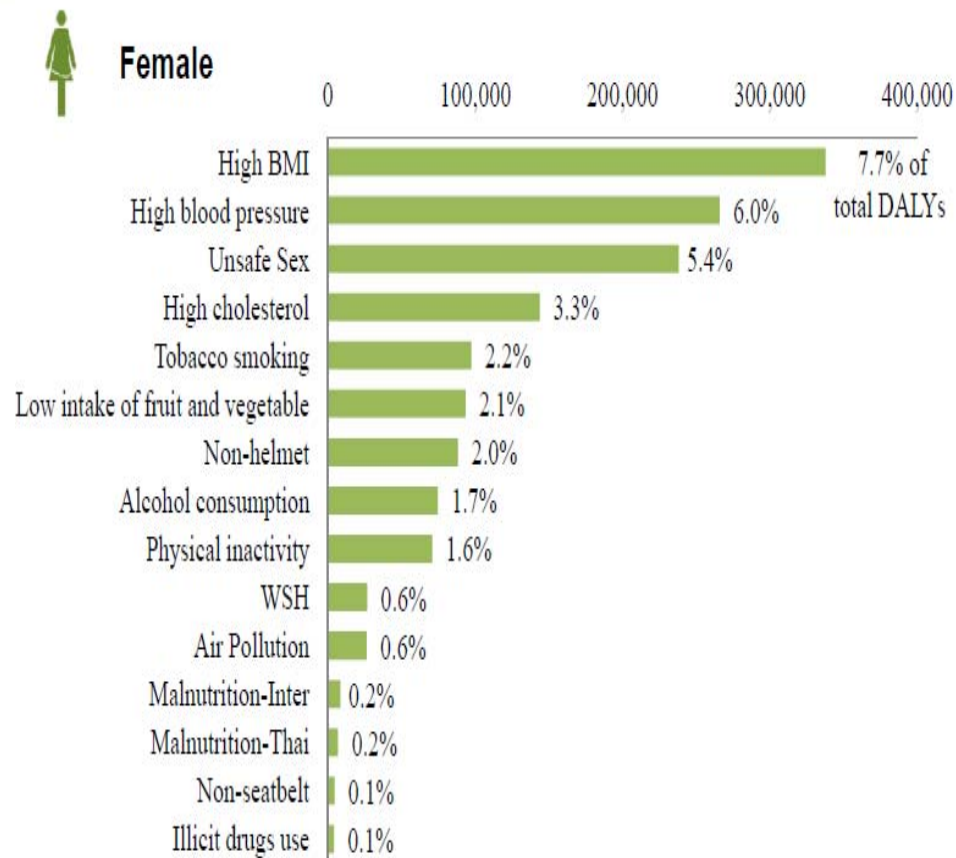
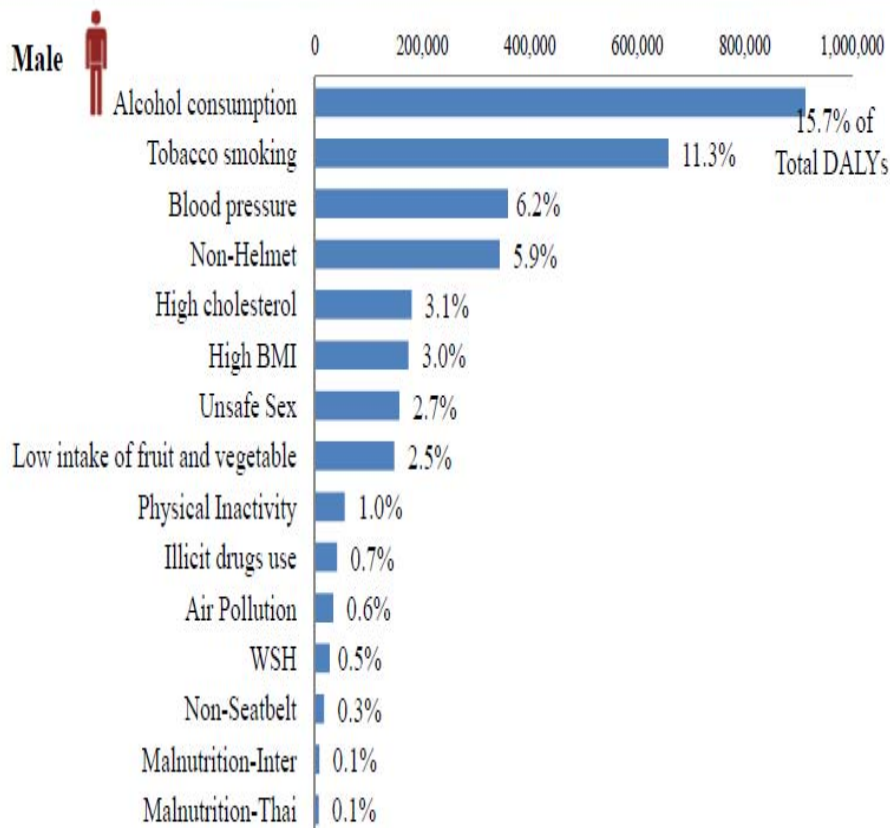
Utilization of NHES data

- Indicators for
 - National Economic and Social Development Plan
 - National Health Plan
 - Thailand Healthy life style strategy
 - National Health Security Strategy
 - Ministry of Public Health
 - Thai Health promotion



DALYs lost by major risk factors

DALYs lost by major risk factors

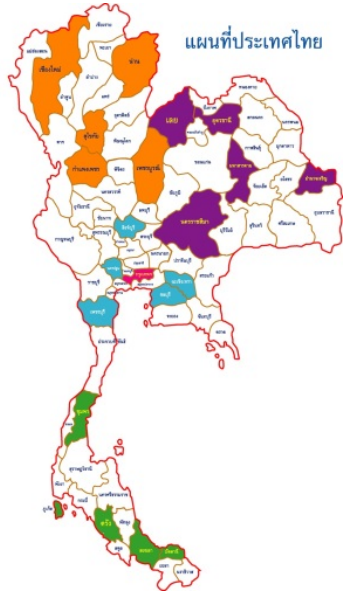


What's new in NHES 5

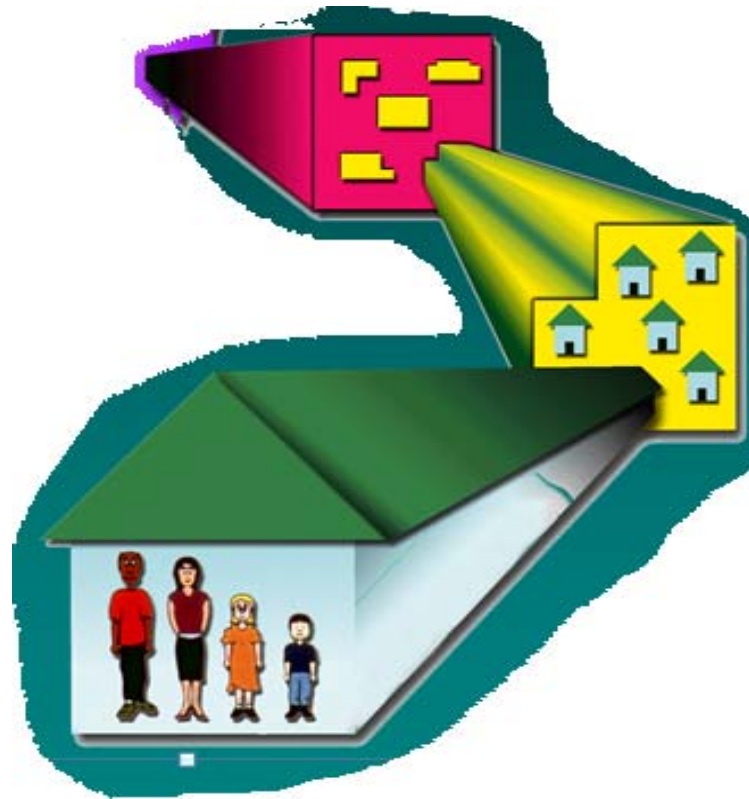
- Sampling frame based on EA survey
- Subgroup OGTT
- Semi FFQ 69 items + fruit & veg consumption
- Urine Na (spot urine) and subgroup for 24-hr urine
-

Stage 1: Provinces: 21

NHES V - 2556



Stage 2: District



Stage 3:

EA: 540

ภาคละ 120 หน่วย

ประชาชนไทย
อายุ 1 ปีขึ้นไป
ที่ไม่ได้อยู่ในสถาบันฯ
องค์กรฯ

Stage 4

Samples :31,700

Survey content

- Obesity
- Diabetes
- Diet
- Anthropometry
- Risk behaviors
- Mental health
- Reproductive health
- Older person health



Survey content

Age group 1-5, 6-9, 10-14 yr.

Behavior

- Eating behavior, fruit and vegetable consumption, FFQ, 24-hr recall
- Physical activity
- TV time /computer time
- Development: physical, emotional
- Overweight/obesity



Survey content

- **10-59 yr, 60 + Yr**
 - **Health behavior**
 - **Diet, smoking, alcohol drinking**
 - **Physical activity, medication, supplement**
 - **Chronic Diseases**
 - **History of CHD, Stroke, Cancer, COPD**
 - **Diabetes, hypertension**
 - **Obesity, dyslipidemia**
 - **Mental health**
- **Older persons**
 - **Cognitive impairment, ADL**
 - **Falls**



NHES procedure

- Ascertain selected individuals at their household to ask for permission and consent
- Interview and examination at local health centers, schools or temples in the community
 - Blood pressure measurement
 - Anthropometry
 - Blood samples,
- Administered by train





Physical exam and tests

- Anthropometric measurement
- Blood pressure measurement
- Child development
- Emotional
- Grip strength
- Gait speed test
- Cognitive impairment MMSI
- Dependency ADL



Biological tests

- Lipid profile:
 - Total cholesterol, HDL-C, LDL-C, triglyceride, creatinine
 - Hct, Hb
- FPG, subgroup: OGTT
- Urine: Iodine, Na/creatinine, macro protein
- Biobank

Survey Network

- **Central Office** – *NHES office, HSRI, MOPH, NSO*
- **North** – *Chiangmai University*
- **Central** – *Chulalongkorn University*
- **NE** – *Khon Kaen University*
- **South** – *Songkla University*
- **BKK** – *Ramathibodi Hospital, Faculty of Medicine, Mahidol University*



**MAHIDOL
UNIVERSITY**



จุฬาลงกรณ์มหาวิทยาลัย
Chulalongkorn University
Pillar of the Kingdom



Timeline NHES5

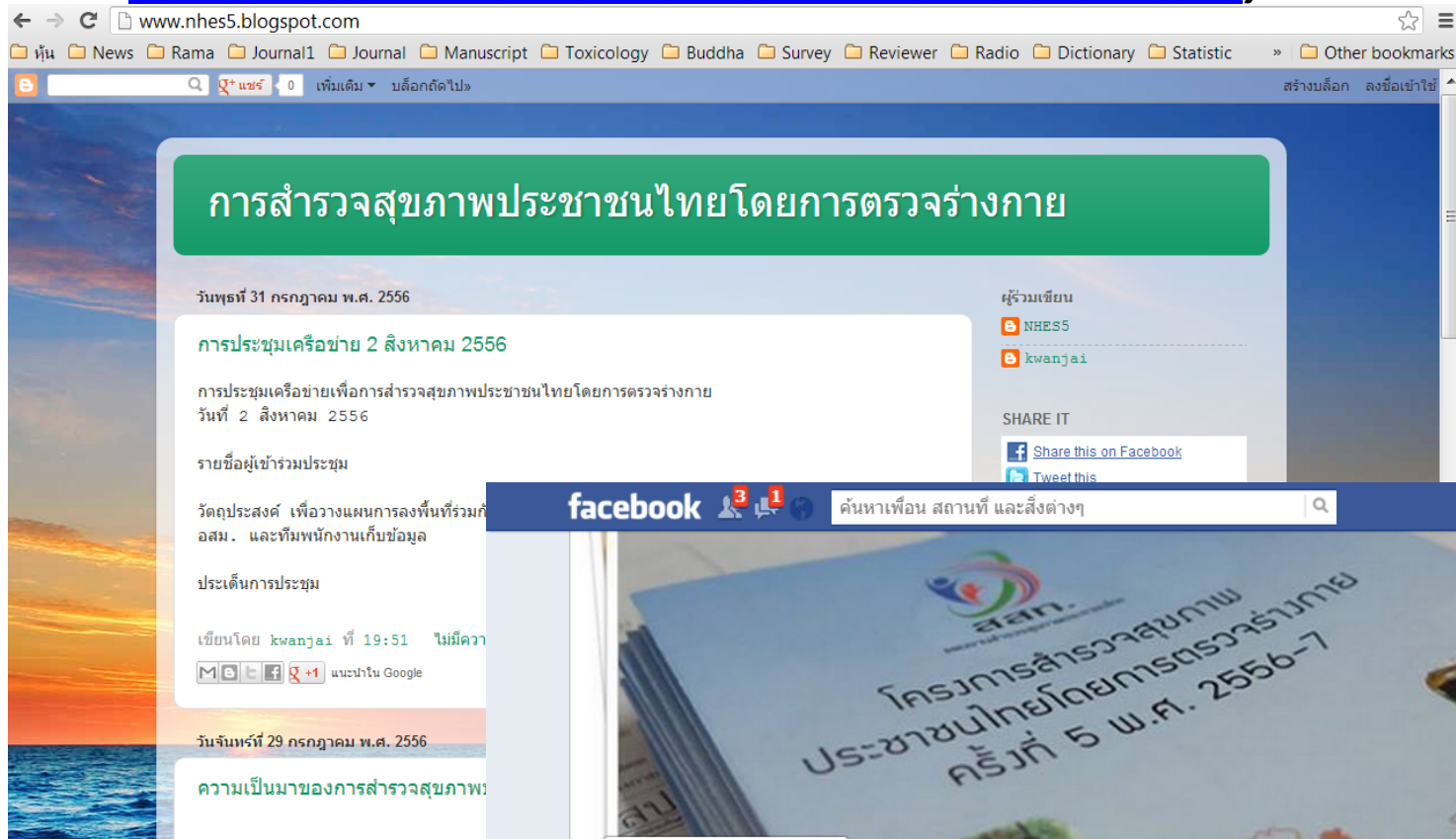
	มค สค๕๖	กย- ตค๕๖	พย- ธค๕๖	มค- กพ๕๗	มีค- เมย๕๗	พค-มិย ๕๗	กค- สค๕๗	กย- ตค๕๗	พย- ธค๕๗	มค- กพ๕๘	มีคเม ๕๘
Preparation											
Sampling, tools, manual	█										
Team preparation, training		█									
Field data collection											
Individual report			█	█	█	█	█				
Data Mx and analysis				█	█	█	█	█	█		
Report					█	█	█	█	█	█	



การเผยแพร่



www.nhes5.blogspot.com, facebook



The screenshot shows a Blogger post on the website www.nhes5.blogspot.com. The post title is "การสำรวจสุขภาพประชาชนไทยโดยการตรวจร่างกาย" (National Health Examination Survey Project). The post date is 31 กรกฎาคม พ.ศ. 2556. The author is NHE5, with a co-author kwanjai. The post content includes a sub-header "การประชุมเครือข่าย 2 สิงหาคม 2556" and a paragraph: "การประชุมเครือข่ายเพื่อการสำรวจสุขภาพประชาชนไทยโดยการตรวจร่างกาย วันที่ 2 สิงหาคม 2556". There are social sharing buttons for Facebook and Twitter. The page also shows a sidebar with a search bar and a list of posts, including one dated 29 กรกฎาคม พ.ศ. 2556 with the title "ความเป็นมาของการสำรวจสุขภาพ".



The screenshot shows a Facebook page for the "National Health Examination Survey Project". The page header includes the Facebook logo, a search bar, and the name "Wichai Aekplakorn". The main content area features a large image of a document titled "โครงการสำรวจสุขภาพประชาชนไทยโดยการตรวจร่างกาย ครั้งที่ 5 พ.ศ. 2556-7" (National Health Examination Survey Project, 5th Round, B.E. 2556-7). Below the image is the project's logo, which consists of a stylized human figure in blue, red, and green, with the acronym "สสท." (SST) below it. The page title is "National Health Examination Survey Project" and it has 84 likes. The page description is "สุขภาพ/การแพทย์/เภสัชกรรม Health Examination Survey Projecy". The page also shows a "เกี่ยวกับ" (About) section with the text "แนะนำการแก้ไข" and a "รูปภาพ" (Photos) section with 84 likes.

Challenges

- More specific issues and tests
 - More field tests;
 - biological tests;
 - environmental exposure;
- Mobile units, Computer aid,
- Support local HES
- Longitudinal Follow-ups
- Mortality studies, verbal autopsy

