Epidemiological Research Training Course V-1

August 15-19, 2011

Ho Chi Minh City, Vietnam

Fukushima

Our long-standing research counterparts in Vietnam kindly made a donation to disaster victims in Fukushima. We also received a message from Ho Chi Minh City Health Service that they were raising funds. We deeply appreciate their thoughtful and generous support. Mindful of their encouragement, we are keeping our plan to execute JICA Partnership Project's epidemiology training course in Ho Chi Minh City this August. Now, more than ever, we feel that international health activities enrich all participating countries, rather than being a one-way flow support from one side to the other.

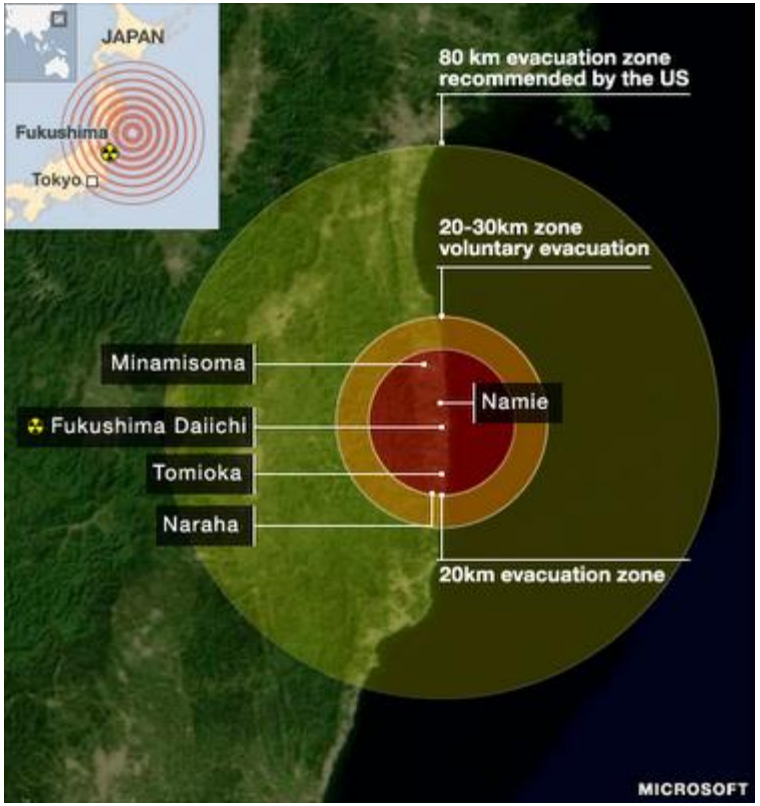
http://cbbstoday.org/images/nolletprs/fmu_pr07apr11english.pdf

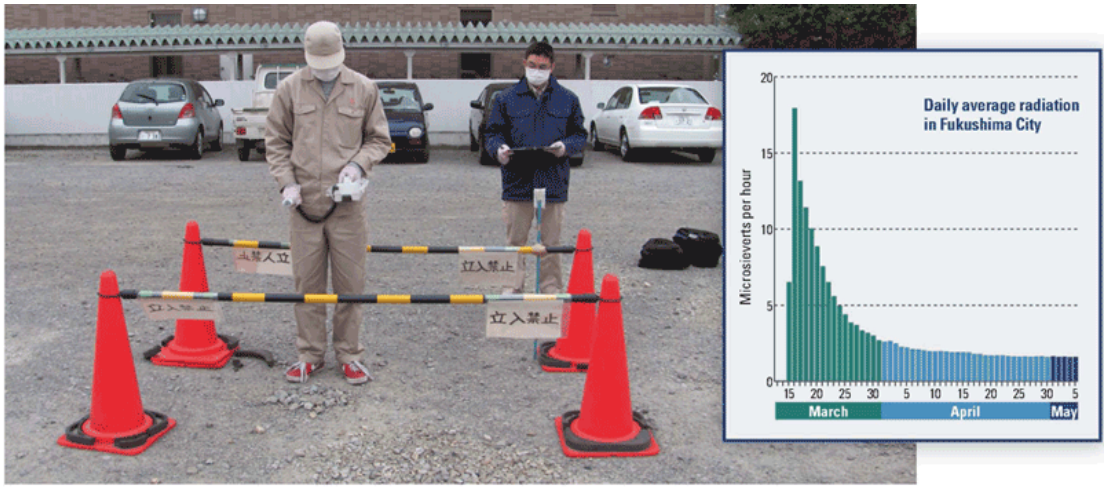
FUKUSHIMA MEDICAL UNIVERSITY

Flooding following an earthquake and tsunami
Sendai, northeastern Japan
March 12, 2011. TIME
http://newsfeed.time.com/2011/03/11/japan-wakes-to-devastation-death-toll-climbs-rescue-effort-continues/

Lancet. 2011; 377(9770): 968.
Japan: health after the earthquake.

FUKUSHIMA MEDICAL UNIVERSITY





Normile D. Fukushima Revives The Low-Dose Debate. Science 332 (6032) 908-910.
http://www.sciencemag.org/content/332/6032/908/F1.expansion.html

http://duniandt.blogspot.com/2011/03/fukushima-disaster-vietnamese.html

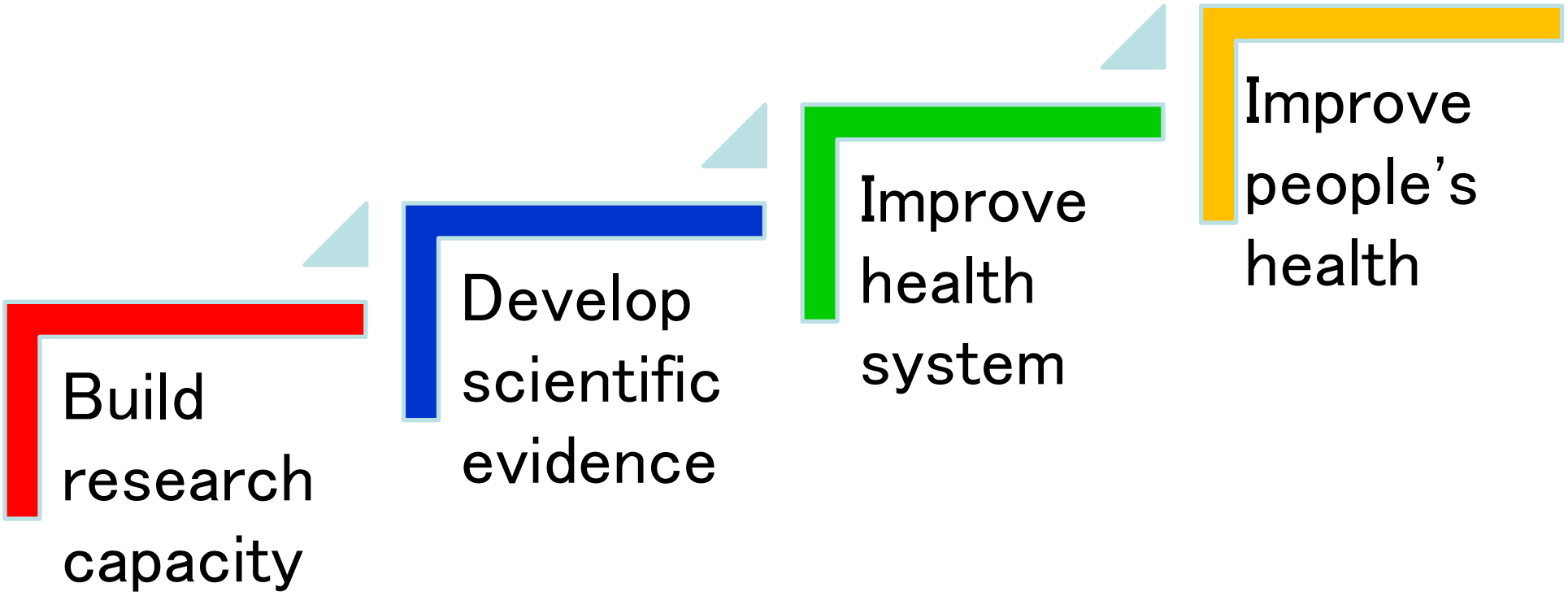
Short-term and long-term health risks of nuclear-power-plant accidents.
Christodouleas JP, et al. Engl J Med 2011; 364: 2334-41.
http://www.nejm.org/doi/full/10.1056/NEJMra1103676

FUKUSHIMA MEDICAL UNIVERSITY

- Public health nurses in Fukushima City are facing raising anxiety among mothers regarding health effects of low-dose radiation exposure.
- What would you do if you receive questions like “How should we respond? Could you please help us?”

FUKUSHIMA MEDICAL UNIVERSITY

Research capacity building



(Nchinda TC. Research capacity strengthening in the South. Soc Sci Med. 2002; 54: 1699-711.)

FUKUSHIMA MEDICAL UNIVERSITY

Project history

	Joint research (VN ←→ JP)	Epidemiology training (VN ← JP)	Medical education (VN → JP)
2002	Reproductive tract infections (JICA)		
2003			
2004	Unintended pregnancy	Epi. Research Training Course I	International Health Elective Training I
2005			International Health Elective Training II
2006	Child rearing and perioperative care	Epi. Research Training Course II	International Health Elective Training III

	Joint research (VN ←→ JP)	Epidemiology training (VN ← JP)	Medical education (VN → JP)
2007	Diabetes care	Epi. Research Training Course III	
2008			
2009	Parenting support	Epi. Research Training Course IV	International Health Elective Training IV
2010		Evidence-based Medicine Training-of-Trainers I	

- We have trained 128 health professionals.

FUKUSHIMA MEDICAL UNIVERSITY

Course content

Morning classes	Afternoon classes
Lectures and exercises on basic epidemiology and biostatistics ⇩ Examination	Lectures on advanced epidemiology and biostatistics
	Group work on critical appraisal ⇩ Group presentation!
	Group work on protocol development ⇩ Group presentation!

❖ Please confirm whether you are in the audit or the project group.

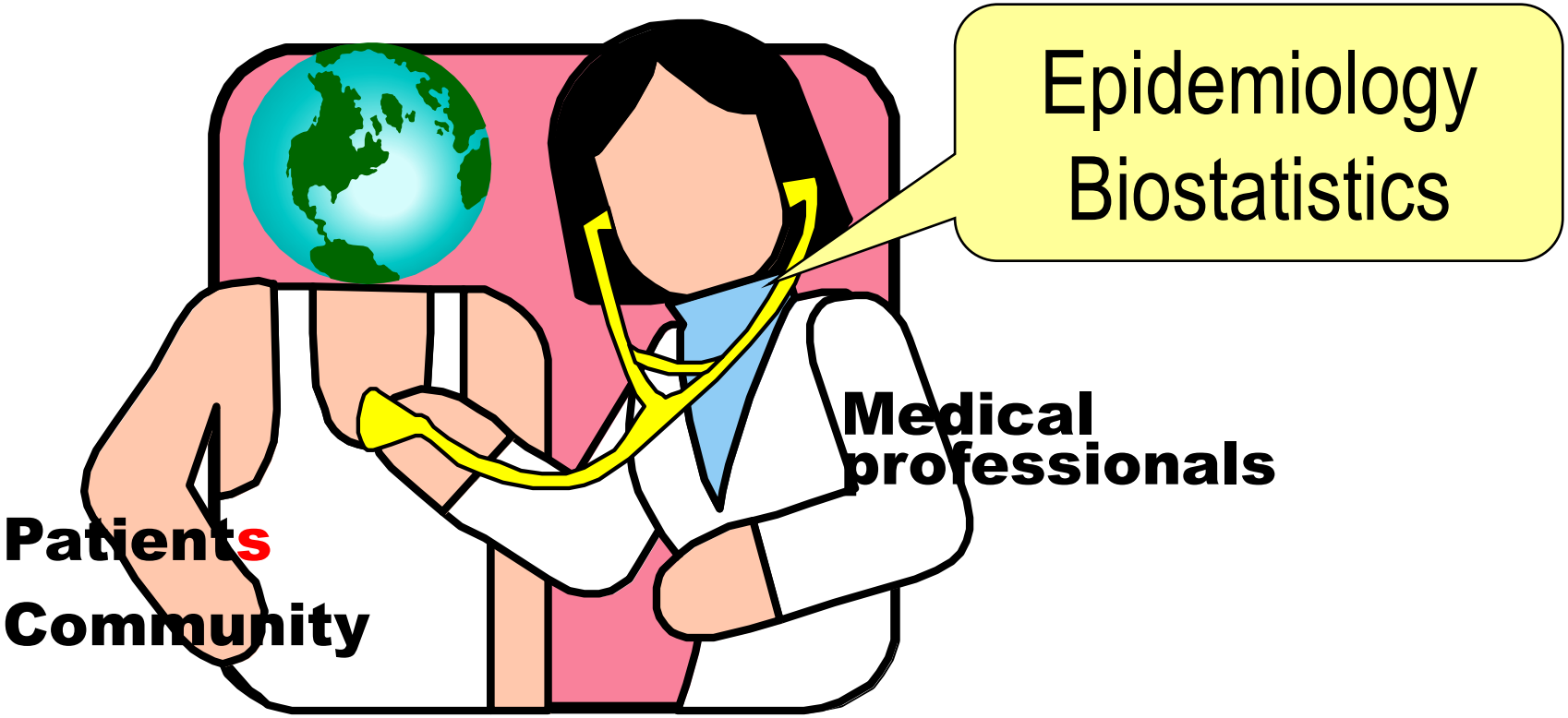
FUKUSHIMA MEDICAL UNIVERSITY

Recommended textbooks

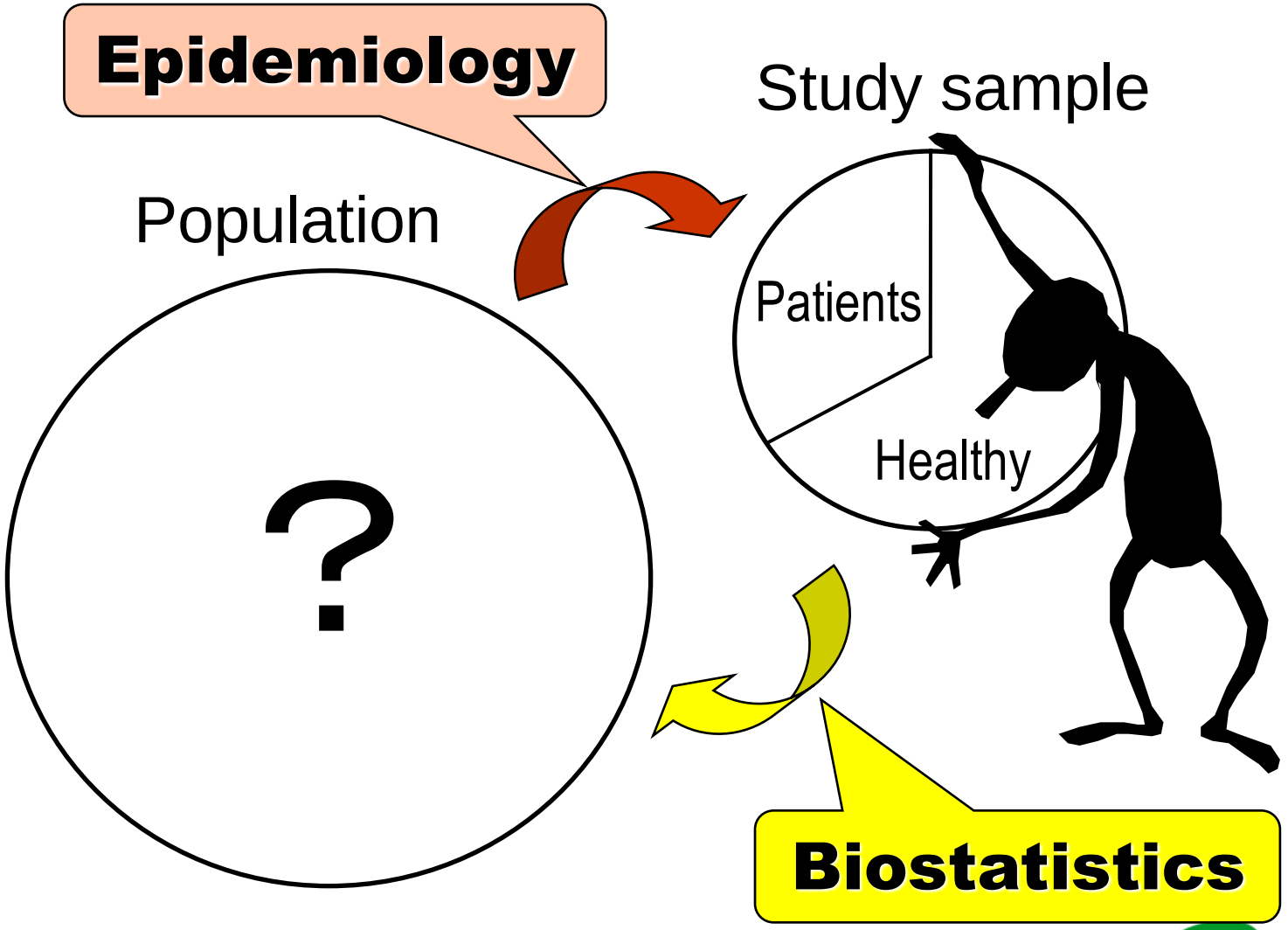
- Gordis L. Epidemiology.
  (WB Saunders Company)
- Hulley SB, et al. Designing Clinical Research.
  (Lippincott Williams & Wilkins)
- Motulsky H. Intuitive Biostatistics.
  (Oxford)
- Bonita R, et al. Basic epidemiology.
  (World Health Organization)

FUKUSHIMA MEDICAL UNIVERSITY

Functions of research methods



FUKUSHIMA MEDICAL UNIVERSITY



FUKUSHIMA MEDICAL UNIVERSITY

Basic research steps

Protocol development

Main survey

Data management
(data cleaning and entry)

Pilot survey

Data analysis

Results dissemination

Literature search

FUKUSHIMA MEDICAL UNIVERSITY

“One chance,
one meeting”

Look around to find collaborators.

FUKUSHIMA MEDICAL UNIVERSITY

Key words

1. Descriptive analysis of available data
2. Cross-sectional study
3. Case-control study
4. Cohort study
5. Intervention study

P-value, confidence interval, relative risk, odds ratio

FUKUSHIMA MEDICAL UNIVERSITY

Descriptive study of available data

- Journal of Epidemiology. 2005; 15: 163-172.

  Aya Goto, Quang Vinh Nguyen, et al.

  Prevalence of and Factors Associated with Reproductive Tract Infections among Pregnant Women in Ten Communes in Nghe An Province, Vietnam

issues when phase II of the project started in 2000. According to the outpatient record of the Nghe An MCH/FP Center in 2002, around 40% of the gynecological patients were diagnosed with vulvitis, vaginitis or cervicitis and treated without identifying the pathogens. The results from a situational analysis of the reproductive health services in Nghe An Province revealed that the RTI treatment given was based mainly on clinical symptoms.[10] The information suggests a lack of proper laboratory techniques and standardized case management in the region.

SHIMA
ICAL
ERSITY

Cross-sectional study

pregnancy delivery 6 months

Follow-up (cohort) study

FUKUSHIMA MEDICAL UNIVERSITY

Case-control study

Factors associated with induced abortion among primigravid women in Ho Chi Minh City

Cases
(Abortion clients)

Controls
(Antenatal care attendants)

Ask about PAST reproductive related behaviors

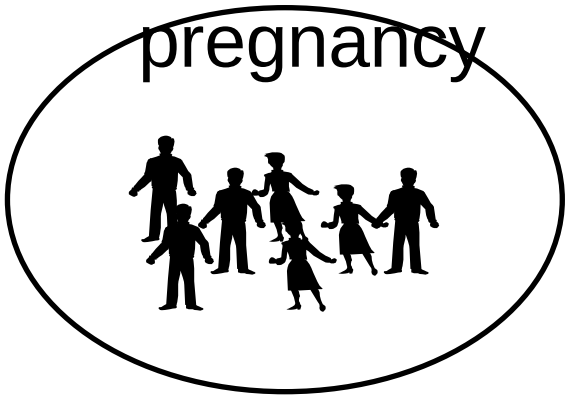
FUKUSHIMA MEDICAL UNIVERSITY

Follow-up study

Influences of pregnancy intention on parenting

Baseline survey

Unintended pregnancy



Intended pregnancy

Follow-up survey to see parenting outcomes

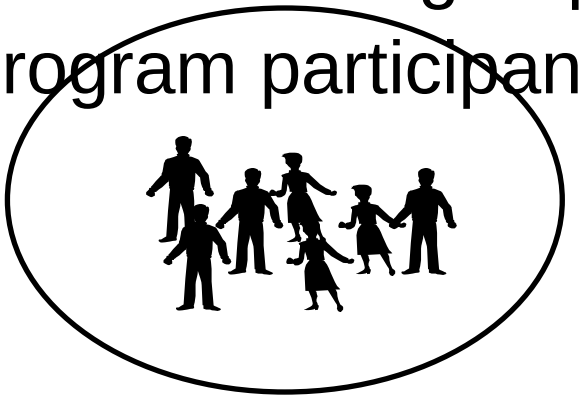
FUKUSHIMA MEDICAL UNIVERSITY

Intervention study

Effectiveness of a parenting support

Baseline survey

Intervention group
(Program participants)



Control group
(Non-participants)

Follow-up survey

FUKUSHIMA MEDICAL UNIVERSITY

Web resources

- Boston University School of Public Health.
  Ann Aschengrau and George R. Seage, 2003.
  http://publichealth.jbpub.com/aschengrau/index.cfm
  (Go to Student Resources – Power Point Slides)
  (For beginners, start with a slide set named “Overview of Epidemiology”)
- University of North Carolina at Chapel Hill
  http://www.epidemiolog.net
- WHO Collaborating Center University of Pittsburgh
  Supercourse -Epidemiology, the Internet and Global Health- http://www.pitt.edu/~super1/

FUKUSHIMA MEDICAL UNIVERSITY