

EPID 600 - on-line Introduction to Public Health

Course Administrative Notes

[Course Bookmarks](#)

[Admin Video](#) **[VIDEO]** for those not able to attend the May 18 group meeting. If the video does not load promptly you may need to click on the refresh or reload button once.

Also, for those who could not make it into the first group meeting, look at this video [Introducing me to you](#). **[VIDEO]**

Before you do anything else: Be sure you know your ACTIVE VCU Email address. When you registered for the course an email address was assigned to you. I must use this email address for scoring your progress in Blackboard. Before the class starts on May 18, 2009, If you do not know your active VCU Email account go to the VCU [Technology Site](#) and activate the email used for your Blackboard account. If you have any problem with this call the Student help desk. The number is 804-828-2227

The first week will start with a face to face meeting on Monday May 18 at 5 p.m. in the 3rd floor conference of the Leigh House. It should last about 1 hour to introduce you to the Blackboard system and computerized tools we will use, and the various textbooks required and recommended.

If you want me to use a different email address from the required VCU email address, used to access Blackboard, for routine contact with you please [email me](#) with your full name and preferred email contact address.

List of students (will be posted by May 22) enrolled in Blackboard on May 19.

MPH Program - Mission Statement - On-Line Course

The Mission of the MPH Program at Virginia Commonwealth University is to promote health and well-being through commitment to public health education, excellence in research, and dedication to community service.

The MPH Program emphasizes community service for under served populations by working closely with local counties, municipalities, and state agencies, as well as with service organizations, to identify community needs and educational and service opportunities for program students and graduates. The Program directly advances the University Mission and the School of Public Health Mission.

Americans with Disabilities Act.

The Americans with Disabilities Act of 1990 requires Virginia Commonwealth University to provide reasonable accommodation for any individual who advises us of a physical or mental disability. If you have a physical or mental limitation that requires an accommodation, or an academic adjustment, please arrange a meeting with me at your earliest convenience.

"Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 require Virginia Commonwealth University to provide an 'academic adjustment' or a 'reasonable accommodation' for students with documented disabilities. Students seeking academic adjustments or accommodations must self-identify with the Coordinator of Services for Students with Disabilities on the appropriate Campus. After meeting with the Coordinator, students are encouraged to meet with their instructors to discuss their needs, and if applicable, any lab safety concerns related to their disabilities

If you have not identified yourself to the Coordinator of services for Students with disabilities please do so immediately at VCU Services for Students with Disabilities
Coordinator: Cheryl Chesney-Walker (clchesneywal@vcu.edu)

Campus location: VMI Building, 1000 E. Marshall Street, Room 301
Mailing address: PO Box 980124, Richmond, Virginia 23298-0214
Voice: 804-828-9782 | TTY: 804-828-4608 | FAX: 804-828-4609
Web: www.vcuhealth.org/vp/sassdss

COURSE Overview:

This course, consistent with the above Mission Statement, is designed to provide students with an overview of the broad field of public health with an emphasis on its application at the community level focusing on under served populations.

Students are expected to read current journals on public health issues and be conversant with relevant public health matters currently under discussion in local, state and national media as well as scholarly publications. All recommended journals are available on-line through the Thompson McCaw Library system using the journal search tool and your EID.

This on-line course is taught in 12 weekly sessions developed by experienced public health and clinical faculty, with direction, coordination and supervision of the course director.

The various faculty, teaching this course, have many years of experience. Some have experience since the end of the second world war, the time at which the recommended reference, by Rosen finishes. During the course we will update you on important policies and activities that have occurred in the last 50 years.

COURSE Objectives:

Upon completion of this course students should be able to describe the skills necessary for the various public health specialists to practice their craft in the community. They should be able to describe the organization of community health services and their relation to, and interdependency with, national and state public health agencies. They should be able to describe the major tracks within public health in which the various public health specialists apply their skills and how these skills are melded together to improve community health status. This includes the organization of public health within various levels of government, and the components of health care as it relates to under served populations. The course objectives are derived from the 2003 studies by the Institute of Medicine: 1. ' [Who will keep the Public Healthy](#)' (see appendix F-Competencies, in this book to review the skills you need to acquire during the MPH course) and 2. ' [Future of PH in the 21st Century](#)'. Also included in the objectives are those recommended by the [Association of Schools of Public Health](#) and those approved by the faculty as part of our [current accreditation](#). Each course session will include several of these competencies as part of the session presentation.

PREREQUISITES:

The prerequisite courses include completion of an undergraduate degree, which contained courses basic to public health such as history, biology, chemistry, statistics, psychology & behavioral science.

Blackboard

All students must use the Blackboard to obtain credit for this course. you will find this at

<http://blackboard.vcu.edu>

Use your VCU logon and password (see above-assigned when enrolled into this course, unless you already had an active VCU email account) to logon to the course. If more than one of your courses is available on the blackboard system choose EPID-600 (Introduction to Public Health, Summer 2009). When you get to the Blackboard you will find the course discussion web. Answers to one or more discussion questions will be required each week, after reviewing the data/readings in the syllabus for the week. . The tests (quizzes) are available for each weekly session, and found in the assignment section. Use of 'Blackboard' discussion fora and tests will be covered in the introductory session to be held during the first week of the Summer Semester. I want to meet with all students enrolled in this course at 5.00 pm in the 3rd floor conference room in the Leigh House, Monday May 19th to be sure we all understand how this course will be conducted. This should NOT take more than 1 hour.

For those of you unable to come to the initial meeting review [this Video](#) **[VIDEO]**

After logging on to Blackboard the first time visit the help tab in case you do not have all the media readers recommended.

Course [Web Pages](#)

It is the intention of the lecturers that the students prepare for each weekly session by reviewing the material on the web pages in this course, plus the readings, and by using the web to search for current topical information using the web links provided within the weekly web pages, plus other links they find for themselves and share with the class. Each weekly on-line lecture session is intended to be give and take, using the discussion board, to be sure that you understand the principles identified for each session. This survey course will provide you with examples of more than 30 different areas of public health practice.

Note on course Material: As some of you may not be comfortable working from a computer screen. I have provided pdf. files for all the slides shows and for the text material for each session. These should be downloaded with Adobe Acrobat, unless you have some other valid '.pdf' page viewer, from which you can print the pages.

If any of you are from outside the US or have little familiarity with the US health care system I have prepared a non credit resource to introduce students to the US Health Care System at <http://www.commed.vcu.edu/IntroPH/essentialsushcs/>

On-Line Course Times

The weekly sessions will start each Monday, starting Monday May 18th, AD 2009 and finishing August 7th. These presentations should take about 4-hours to review each week

Course Objectives

Before doing anything else, bookmark this URL <http://www.commed.vcu.edu/IntroPH/Lectures.htm>

Upon completion of the course, students will be able to:

- Describe the breadth of Public Health & Preventive Medicine Practice in the U.S. specifically, and the world in general
- Describe the content and technology of public health practice, with an emphasis on its application to under served populations in a community.
- Differentiate between the public health professions contributing to improvement of the public's health
- Articulate the functions of national, state and local public health providers/agencies
- Describe the major categorical functions of public health in relation to the year 2010 national health goals.
- Better understand the forces of change impacting the public health profession by health care reorganization.
- Describe the links between public health & medical care.
- Be able to describe how public health activities strengthen the community's health status and interrelate to public and private human service agencies.,

This course addresses the following [MPH competencies](#):

1A (1,3,9), 1B (1,2,5,8), 1C(1,2,3,4,5,8,10), 1D(1,2,4,5,6,7,8,9), 1E(1,2,5,8,10), 1F(1,2,3)
IIA (1,2,3,4,5,6), IIB(1,4,5,6,9,19,), IIC (2, 7,9)

Key Words

Public Health, Goals, Objectives, Health Care System, Content of Public Health, Core Content, Expanded Content, Resources. Public Health Law, Public Health Ethics.

READINGS.

The required readings for the Introduction to Public Health practice are found in:
Introduction to Public Health by Mary Jane Schneider, 2nd edition. Published by Jones and Bartlett in 2006 and
Essentials of Public Health. Bernard J Turnock, Jones & Bartlett. 2007

Strongly recommended: The Future of Public Health (available on-line - [see below](#)), published by Institute of Medicine in 1988, and '[The Future of the Public's Health in the 21st Century](#)', these should be scanned before each class.

Two useful books, not required for this course but which will help if you have not decided on which path to use for your future career are

Public Health in Action by Jan K. Carney ISBN13 - 978-0-7637-3447-3, 2006 AD and
Public Health - Career Choices that make a Difference Bernard J Turnock. ISBN 13-978-0-7637-3790-0. 2006 AD
The first book focuses on PH philosophy with recent examples from local health departments in the North East. while the second focuses more on job content in the major avenues of PH careers and the administrative & policy challenges associated with them.

Much of the material provided in the EPID-600 course will be found in Dr. Buttery's essays which are updated annually. The original ones were the basis for his 'Handbook for Health Directors' published by Oxford University Press in 1990. That material is now out of date. When you get to the index page for these essays you will note that some of the essays will be of use for both EPID 600 and 602 (the recommendation is shown in brackets after each essay). [Click Here for these essays](#)

A book that I recommend for EPID 602 may also be worth purchasing and reviewing during this course. It is Public Health Management by Fallon LF jr. and Zgodzinski ER, also Published by Jones and Bartlett in 2005.

Other supplementary readings may be recommended by special guest lecturers, or experts on specific topics, designed to augment sessions presented by the course director. Students are also advised to use VCU's [E Journal Search Page](#) to become familiar with:

The American Journal of Public Health (On Line)
The Journal of the American Medical Association (On-Line)
British Medical Journal (On-Line)

Two useful books to look at if you have time are:

Epidemiology in Medicine. Charles H. Hennekens, Julie E. Buring, editor Cheri Mayrent; Publisher, Little, Brown & Co.

Public Health & Human Ecology: Last J. M. Appleton & Lange. 1997 2nd Ed.

The following references may be consulted frequently during the course:

US Preventive Service Task Force: [Guide to Clinical Preventive Medicine](#) 3rd edition

Reading & understanding Applied Statistics, A Self Learning Approach, Stahl & Hennes (CV Mosby)

Socioeconomic Characteristics of Medical Practice. AMA [Center for Health Policy](#) Research.

Control of Communicable Disease in Man. Ed: David L. Heymann, 18th Ed. 2005, APHA ISBN: 0-87553-034-6

Students are expected to become familiar with current public health issues, such as:

- new medications for AIDS/HIV and TB
- prevention of violence
- emerging infections of public health interest such as SARS, and monkeypox
- aging
- chronic diseases
- Bioterrorism

SPECIAL REFERENCES:

Students should visit the [MMWR Weekly Report](#) and click on the FREE MMWR subscription. This will bring you the MMWR each week as an email attachment. Provided you have set your computer up as recommended in the administration section of the introduction, you will be able to read the MMWR in adobe format. You should read this each week and be prepared to use the material in class, in quizzes, discussions and examination answers, and

to enhance class material.

Prior to each class visit [Healthy People 2010](#) and review the criteria related to the evening's topics by clicking on the [Leading Indicators](#). You may want to visit [HP 2000](#) and see how the criteria have changed since 1990. Think about why they have changed. What data has been used to develop indicators?

You should also visit the National Academy of Sciences publication list to look at [The Future of Public Health](#) and consider whether the Recommendations of this 1988 are currently being implemented, or why they are not yet implemented. What differences can you find in the above reference to the "[PH in the 21st century](#)". Be prepared to discuss these issues with your lecturers.

For those student who have never had to deal with the US Health care system I have provided a non credit [introduction](#) which should help you with both this Course and Dr Lanier's Health Policy Course

Students are expected to read a daily regional newspaper of general circulation (e.g. Richmond Times Dispatch, Washington Post, New York Times) and at least one weekly news magazine such as US News & World Report or Newsweek. Students will also find useful information for the course by accessing the Internet either through the school's intranet or their personal computers. The course director will provide Web addresses (URLs) for the CDC, the NIH, the AMA the IOM of NAS and the APHA.

Students are expected to supplement class materials with readings of their choice from the medical school library.

Use the BLACKBOARD Discussion web to discuss readings from the MMWR and Healthy People 2010, to comment on faculty presentations, and to answer questions posed during each week's presentations. Student discussions on the web will be monitored by faculty to suggest additional sources to clarify ideas presented on the discussion web. A link to the discussion web will be found on the introductory page for each evening's presentations as well as on the course contents page.

EVALUATION

This course is designed to provide the student with general knowledge of the scope and content of public health, and its relation to health care services. Note: each week you have 7 days in which to answer the quiz and discussion board issues for the associated weekly topic.

Discussion Board: (12.5 points per half semester - 25% for semester score)

The discussion board review for each covers: period 1, the first six weeks, and period 2, the last 6 weeks. Each period will be allocated 12.5 points. There are 3 questions for each week. Cutting and pasting an answer from an encyclopedia or newspaper is not acceptable. Each question on the Discussion Board (3 most weeks) requires a minimum of 100 words for an acceptable answer. The quality of answers may result in an award of extra points for each period. The extra points are awarded for exceptional use of the internet in finding answers to questions, or useful new URLs or a combination of these..

Quizzes:(12.5 points per half semester - 25 points for semester)

Each evening is associated with a quiz found on the course Blackboard. Grades will be assigned based on the first attempt. *You may attempt the quiz again* to show that you know where your first attempt was incorrect, but the grade is based on your first attempt!

Mid term and Final examinations will assess the student's ability to describe the scope and content of public health practice in written form. The final Summary Grade will be a standard letter grade summing the results of mid term, and final written exams, plus the quizzes. [Note about grading. Although the each question is assessed a letter grade, the letter is determined by first grading each answer on a 100 point scale [92-100=A, 81-91=B, 71-80=C, <71 =D-/Fail] The Department will also provide forms for you to evaluate the course at the end of the course

Mid Term Examination: (15 points) You will have 7 days to prepare and submit (email) your answer.

The examination will consist of an open book examination, for which the student will be required to complete one approximately 700 word (minimum) essay, from 3-5 topics related to the first 6 weeks of presentations. This examination will count for 15% of the semester grade. The semester grade will be a standard letter grade. additionally students will have to have answered each of the questions on the discussion board satisfactorily and completed the blackboard quizzes

Final Examination: (35% points) You will have 7 days to prepare and submit (email) your answer.

The final exam counts for 35% on the semester grade. This examination will also be an open book examination for

which the student will be required to complete two(2) approximately 700 word (minimum) essays, from 6-8 topics that will be presented to the student at the next to last session of the course. The essays should be presented as an email attachment sent to course director at cbuttery@vcu.edu .or rokimbo1@verizon.net

Guide to answering written examination questions. Carefully review the Keywords and Concepts for the topics. Additional points are given for using material provided in the lectures, readings and from Web Research. This additional review is likely to lead to an "A" for the question answered.

Special suggestions

Because this is an on-line course I am providing additional recommendations for achieving a high score. You do not have the opportunity to question the various faculty who have contributed to the course, as you would in a classroom so it is important that you pay special attention to the quizzes and weekly discussion boards, as well as the mid-term and final examinations.

The only way I have to decide how well you understand the material provided is by your performance on the weekly assessments and questions you place either on the first discussion board or that you send me by email.

For the quizzes you are allowed three attempts to get a correct set of answers. If you get all the questions correct on the first attempt you get 100% for a quiz. If you need two attempts to get everything correct you get 90% and if you take 3 attempts you get 80%. Note that all attempts at quizzes are time stamped and recorded. I will only view the first three attempts, any further attempts will be deleted.

For the weekly discussion boards I will expect you to have researched you answers and provide reasons for them. While you can copy and insert quote from part of a web page from an agency such as the CDC or IOM you must explain why you selected the quote. I expect a section of a discussion board (there are usually 2 or three question on a discussion board each week) to be at least 150 words. You may use more if you wish but I am impressed with conciseness and relevance for an answer. In others words use the least words you need that will show me that you reviewed and understand the material provided.

Introductory session

History, goals and organization of public health.

Students should be able to describe:

- How public health issues have affected health status over more than 4000 years.
- The purpose and outline methods used to develop public health policy and goals.
- The organization of federal, state and local health departments.
- Common activities carried out at each level, as well as certain special activities restricted to a particular organizational level.
- Who, what, when, why that make up the practice of public health

The scope & expertise necessary to practice public health requires a study of the fundamentals of biostatistics, epidemiology, environmental science, toxicology, ethology, physiology and behavioral science will permeate each sessions of this course.

Federal and State organizations and their responsibilities for Public Health Services. The major players in the game. An overview of traditional public health programs, the disciplines needed to carry them out are a focus of this course.

References

A History of Public Health. George Rosen, 'Future of Public Health'. IOM.

Reading

Introduction to Public health :Schneider 2nd Ed.. Chapters 1 through 3.
Essentials of Public Health. Turnock. Chapter 1
Review the [USPHS](#) & [Virginia Department of Health](#) [VDH] Web pages
To read journals on-line use this [library access web page](#)

Class Roster

Special Reference. For students who have no experience with the US Health Care System a primer is provided [here](#). Take your time over this. It can be completed over the course of the semester and will prepare you for Dr. Lanier's class on Health Policy.

The continuing theme of this course is that epidemiologic and biostatistical expertise are the underlying skills needed for all activities, whatever the field, in public health. [Visit Healthy People 2010](#) before each week's session and review that part of the Healthy People Process which relates to the week's discussion, to prepare your thoughts for the discussion boards.

The first, and probably the only material you need to memorize from the entire course is:

- The [Ten Essential Public Health Services](#) which are further expanded in
- [The Essential Public Health Functions](#). (in the National Public Health Performance Standards Program)
- [Principles of Ethics](#) for Public Health

these functions are the basis of public health as it enters the second millennium. They are the most recent consensus among the major national public health groups, following the 1998 "Future of Public Health" book (see link to the on-line text below), produced by the Institute of Medicine of the National Academy of Sciences. This book should be part of your own permanent library. You can view the CDC PPT Slide Show of the [10 Essentials](#) (you will need a fast link, preferably cable or the VCU Intranet)

The triumph of public health.

Until recently, the concept of prevention was most often tied to public health efforts, in particular to the prevention of infectious diseases. These preventive interventions had their roots in the 1800s.

In 1846, Ignaz Semmelweis instituted handwashing on his obstetrical ward in Vienna's teaching hospital, cutting the death rate among delivering mothers more than fivefold. Joseph Lister later credited his developments in antiseptic surgery to Semmelweis, "Without Semmelweis, my achievements would be nothing."

In 1854, John Snow, Queen Victoria's anesthesiologist, removed the handle from the Broad Street public water pump in London's Soho district, ending a cholera epidemic that had killed more than 70 people over two days. (<http://www.rethinkingwellness.com>)

The ten essentials are the culmination of over 2000 years of development of 'Hygiene' practice as identified in the web page on the [history of public health](#). Dr Ted Tweel, the health director of Hanover County Health Department, has provided a short [history of major events in Virginia's public health](#). Also review the [History of Public Health in Virginia](#), a Power Point presentation prepared by Jeff Lake, Deputy Commissioner of Health, VDH. ([.pdf version](#))

Take a look at [death rates](#) for the five leading cause of death in 1900 and see how they have changed. Also, look at the [changes in life expectancy](#) in the U.S. over the last 150 years. Look at the WHO [Global Challenges](#) for Public Health -2002. How good is health care in the US, compared to other

countries? Can you find the answer on the web and put your conclusion in the first section of the discussion board.?

An essential read: Elizabeth Fee's [Unfulfilled Promise](#)

Also, review [summaries of three projects](#) from the Robert Wood Johnson Fund (RWJF) identifying weaknesses in the Public Health System.

For every lecture/discussion of the MPH program you should consider how the specific session incorporates the five basic skills of public health which are:

- epidemiology
- biostatistics
- environmental health
- social and behavioral science
- health services administration

Also be aware of the [Principles of Public Health Ethics](#). Then you should consider whether they are also incorporated into the following extended skill set which the [IOM 2003 study](#) recommended as being incorporated into all public health education:

- Informatics
- Genomics
- Communication
- Cultural competence
- Community based participatory research
- Global Health
- Policy and Law
- Ethics

Also look at the [Core Competencies Project](#) of the Council of Linkages. These core competencies are the application of the ten essentials (above.) While you are visiting this site look at the CCP home page to learn about the Council on Linkages. Each session will include a continuing focus on public health policy in practice. Policy development will be discussed in the Winter Term in Dr. Lanier's course. The outline of Dr. Nelson's discussion of goals and policies in the public health arena are found in the [Goals web page](#), ([pdf](#) of Dr. Nelson's presentation) Part 2 of tonight's session

Recent literature on ethical [relationships](#) between patients and their physicians are applicable to communities and their public health agencies as [partners](#)

Also, in preparation for the remainder of the course review the [content for training in public health](#) AGAIN, recommended by the Teachers of Preventive Medicine. This outline was prepared as a supplement to the Ten Essential Functions, referred to above. This outline is pertinent to anyone planning to practice public health and should be used as a learning tool in every course you take. This will allow you to see how the various elements of each course fit into, and complement, the other courses to ensure that you will be have acquired the skills necessary to carry out the Ten Essentials. when you are awarded your MPH. Consider this [organization chart](#) as one way of displaying the major elements of health care provided in the U.S. If you want to print out this graphic use landscape mode. *[This slide is a macro enabled Power Point slide show. Once you open the slide in Slide Show mode. move your mouse over the various boxes to get explanations of the content.]*

The WHO Statistical Report of HEALTH SYSTEMS Performance [for 2003](#) indicated that the US was 43rd when measured by health outcomes such as death rates, disability rates, and survival rates. Also review the report, issued in August 2006, from the [Commonwealth Fund](#) about development of a "High Performance Health System" in the US. If you want to follow this up I will be happy to forward the complete report (some 18 pages) by email upon request, and the update in [August 2008](#).

Optional Viewing [Primer on the Federal Budget Process](#), with emphasis on the health budget

Valuable URLs:

[WHO A guide to statistical information at WHO](#)

WHO Statistics 2007 [Ten Highlights \(.pdf\)](#)

The next two documents should be scanned for this session but read through during the rest of the course as the contents will place many of the other issues into perspective in the rapidly changing field of public health policy, particularly the segments on primary care access and caring for the uninsured

[Health care Coverage](#)

[Obstacles to changing the system.](#)

[Dr. Buttery's Blog](#)

URLs for this session

Also, You may want to place the following in your Links for public health on your web browser as you start to develop a public health library.

[National Academies Webcasts](#)

Is American [health care](#) the best? (The website registration should be free)

[Bioinformatics](#) Standards

[Preventive](#) Counseling

[Prevention Database](#)

[Key Resources](#) on Health Coverage and the Uninsured

Additional Useful Readings:

[How to read an article](#)

[WHO & US Health Care](#)

[State H.D. Organization Charts](#)

[National Academy Press](#)

[The Public's opinion about Public Health](#)

[The Future of Public Health](#)

EPID 600 - Introduction to Public Health (on line)

Communicable Diseases of Public Health Importance

Week 2

Concept

Control of acute infectious disease is one of the oldest public health practices. It just as important today even as new infectious diseases such as SARS, Monkeypox, and Avian Influenza emerge to take the place of those diseases brought under control. The Infectious disease models for this session are HIV, TB and Communicable diseases.

Key Words

AIDS, HIV, False & True Positives, High Risk groups, High Risk behaviors, quarantine, incidence, prevalence, chronic, acute, incubation period, antibody, disease, vaccine, immunity, Pasteur, eradication, cost-benefit, law & regulations, high risk populations, sexually transmissible disease. SARS. Substance Abuse

Objectives

After reviewing these three groups of infectious diseases the student should be able to describe

- policymaking approaches used to control infectious disease outbreaks in a community.
- To state when and how quarantine may be useful in protecting the community from particular individuals with these diseases, based on the use of modern epidemiologic principles.
- How the community models for control of HIV, STDs, TB, and Immunizations have changed since W.W.II,
- Why these diseases still remain problems.
- How certain substance abuses have obstructed the public health professionals from making significant reductions in new HIV infections, and what role HIV plays in TB infections ,

Vaccine Preventable Childhood Diseases

Despite many resources devoted to full immunization of children by 2 years of age, the U.S. still lags behind many developed and under-developed countries. You should be able to discuss why strategies that work in almost every other country fail in the US. Are the issues cultural, behavioral, failure of communication, or political?

HIV as a model:

for a recently emerged (within the last 20 years) disease of public health significance. It also provides a model to study issues of policy, politics and practice, particularly how such models can deter acquisition of Sexually Transmitted Infections (STIs).

TB was under control 15 years ago

Students should be able to describe why, despite availability of antibiotics, this disease has become less controllable and more widespread in the U.S. and the world, particularly Africa and Asia.

Substance Abuse as an impediment to reducing new HIV/TB infections.

Despite the knowledge developed over the last 25 years since HIV infections were discovered in the U.S., and the ability to control HIV infection, as a chronic disease, in the same way TB has been controlled for the last 50 years, the abuse of injectable drugs such as cocaine and heroin have contributed to many new infections of both HIV and TB. There is little doubt that much reduction of new infections can occur in the absence of policies/programs that deter abuse of injectable drugs, but together prevention will be improved..

References

(Scan) Web pages of CDC & IOM
Oaukn A Offitt MD: The Cutter Incident. Yale University press. 2005
Arthur Allen. Vaccine, Morton & Company. 2007
[Rx for Survival](#) - [Rise of the Superbugs](#) And How Safe are We? PBS series - On-Line and 3CD set. 2006

Reading

Introduction to Public Health: Schneider Chapters 9 & 10
Essays - [number 7](#)

EPID 600 - Introduction to Public Health

Communicable Diseases of Public Health Importance

Joy Zeh , CMG Buttery, Margaret Tipple MD, James May Ph.D.

.This presentation covers three models of infectious disease that continue as public health problems, despite advances in epidemiology and microbiology. Further, the issue of substance abuse as a public health issue is introduced in this session because of its significant role in maintaining the incidence of new HIV infections, and to some extent TB. One of these diseases, Tuberculosis, has been present (seen through anthropological studies) for millennia while HIV infection has only been recognized for the last 25 years. Look at the [UNAIDS](#) Page and its links. Compare the value of knowing that a person is infected with either HIV or TB. What is the expectation of someone with TB infection spreading the disease compared to someone with HIV infection?

The discussion on [Tuberculosis](#) identifies the populations at risk and the problems of dealing with a well known chronic disease, studied for many years, but still ineffectively controlled.

[HIV](#) identified only since 1982, provides a model for the positive and negative activities in developing public policies to control an infectious disease, particularly a sexually transmitted infection. Scan "Science" using Tompkins McCaw library E-Journal search to review the May 9, 2008 issue relating to HIV vaccine problems. Particularly the pdfs on [prevention](#) and [vaccine issues](#).

The [Immunization](#) discussion discusses problems with the use of technology to prevent, rather than control, long standing communicable diseases, particularly infants and children, but also in adults..

Find the [CDC home page](#) on the web. Then, using the publications link review recent issues of the MMWR relating to the topics for this session and be prepared to discuss them in class. Also look at the home pages of the [National Center for Zoonotic, Vector-Borne, and Enteric Diseases \(ZVED\)](#) and [Center for HIV/AIDS](#), Viral Hepatitis, STD, and TB Prevention and [Emerging Infectious Diseases](#). Be prepared to discuss how the issues presented by the lecturers might impact on newly emerging diseases. Be prepared to enumerate recently discovered infectious diseases. What do West Virus, SARS, Monkeypox and HIV have in common? Finally look at this video about [battling smallpox](#) and Poli by Dr Larry Brilliant.

As for all sections of the course always check out the VDH web site, In this case the [Disease Prevention](#) pages.

Tuberculosis

Margaret Tipple MD, Virginia Department of Health

Review the presentation on Tuberculosis: Part 1, [Slides](#), [Handout](#). Part 2, [Slides](#), [Handout](#). Then look at the example of [goal setting to reduce TB incidence](#) and be prepared to discuss the epidemiological basis for such goal setting. Also, review the CDC web pages devoted to [TB, HIV & STD's](#). Also, look at the home page of the [National Center for Infectious Diseases](#), look at the divisions of the NCID and the latest issues of the Journal of [Emerging Infectious Diseases](#), also on this CDC web site. Be prepared to discuss how the issues presented by the lecturers might impact on newly emerging diseases. Be prepared to enumerate recently discovered infectious diseases. Take a look at the Global Issues defined by the [WHO](#). For those students from outside the US who have seen the effectiveness of BCG in TB prevention, look at [this article](#) from the Lancet (April 2006) and try to determine why BCG is not used in the US. Note that substance abuse is becoming a [common risk factor for TB](#).

References:

[The BCG Quandary](#) (pdf)
[BCG Effectiveness](#) (pdf)
[Stopping BCG in the UK](#)
[TB & AIDS](#), Recent JAMA Article
[TB among Foreign Born](#) in US, JAMA, July 08

HIV disease, Joy Zeh VCU HIV/AIDS Center - 828-2210

An example of development of Public Policy.

1. [Review](#) Changes in Sexually Transmissible diseases since W.W. II. Further, look at the [attached map](#) of syphilis in Portsmouth (an early use of GIS). Although this map is 35 years old there are still few instances of this type of analysis. We will discuss it more next week as part of the GIS programs. How effective do you believe Condoms are (See what the [CDC site](#) says about condoms and STDs. Where did you look?). Latest [from the AMA](#) 5min. Video on HGOV [prevention. A recent article on [Condom use worldwide](#).
2. [Review Slide show outline on HIV infection & disease \(.pdf version\)](#). Also look at the [VCU HIV/AIDS center](#)
3. Examine [this table](#) and be prepared to discuss why HIV Premarital Blood testing was not passed by the Virginia Legislature.
4. When was HIV infection first recognized in the US?
5. Look at the PBS info: Deadly Diseases - [HIV/AIDS](#).
6. July 2006 Science editorial: Dr. Fauci on [25 years of HIV/AIDS](#), MMWR June 2, 2006 - [25 Years of HIV/AIDS](#), USA
7. How far have we progressed in developing a vaccine. See this latest [article by Dr Fauci](#).

HIV Web Sites

Take a look at the [VCU-HIV/AIDS center](#) web (fees for courses are waived for most students at VCU if you are interested)

HIV Web Sites

[Aids Clinical Trials Information Services](#)
[University of California \(SF\)](#)
[CDC site](#)
[Advocates for Youth](#)
[JHU-Isoniazid & HAART](#) (Aug 10-2006)

[STI statement](#) from AMA
How [not to have sex!](#)
Physician Education - Use of rapid HIV test ([video](#))

An excellent site for Health Professionals, patients and the general public is [The Body.Com](#)

Immunization Programs

C.M.G. BATTERY MD MPH

Look at this [History Factlet](#): Has anything changed? Look at the [Immunization Recommendations](#) for 2007 for children and consider some of the [issues to consider](#) in immunizing a population. Also, scan the Information CDC's [National Immunization Program](#) web.
Then look at the list of addenda found at the end of the table. How do you think this addenda affects use of the table of immunization by practitioners? Now consider why the U.S. immunization levels are so poor compared with many other countries, and what could be done to improve them. Read the article on Registries from the AJPM (Am.J.Prev.Med 2003;24(3)P278-280) Reading articles for this course is best done by going to the Library web page, selecting the TML Medical library, then using the E-Journal option to find the journal and article on line. Review the [CDC Publications list](#) for immunization issues and review some of the materials available before coming to class. Mr McCain, the Republican Candidate, this spring incorrectly stated there was a proven link between the MMR vaccine and Autism, This is not the case. [Read this report from the BMJ](#), Remember that [Adult Immunizations](#) are equally important, particularly for the elderly (>65 and those with Chronic diseases). Also look at the .pdf article on [Parental Attitudes](#) . You may find the Merck Manual web site on [Barriers to Prevention](#) worth visiting as much of the topic also relates to immunization. Also take a look at this short video from the AMA about [language barriers](#). What about Children in other countries? [Read this report](#).
Look at the [Flu/Pneumonia Fact Sheet](#). The AMA has developed [A Site](#) for immunizations. Review the progress in [Worldwide Polio Eradication](#) and consider what makes this program effective outside the U.S., and what constraints are present in completing the work. Finally, take a look at the issues developed by the [All KIDS Count project](#) of the R.W.J. Foundation.
Look at the CDC discussion of [Immunization Registries](#).
An interesting look at history - [Smallpox in 1806](#). Consider whether [medicines are losing their effectiveness](#). A final important site for public health is the [WHO](#) Immunization Program. Could 'Flu' be a [bioterrorism agent](#)?

Summary of CDC Ppt Shows [Slides](#) [Handouts](#)

Substance Abuse

James May Ph.D.

Review this [presentation](#) by Dr. May ([print version](#) of slide -pdf). Think about the relevance to the issues of HIV described by Karen Weir-Wiggins and consider what public health policies might be used in conjunction with infectious disease skills to combat the current incidence of new HIV infections. When looking at the slides pay particular attention to slide 8. Do you think decriminalization of substance abuse would be a valid public health policy (why or why not)

Additional References:

2 PowerPoint shows from CDC
[Immunization Strategies](#)
[Immunization Safety](#).
Also
Issues of [Compulsory Vaccination](#) (pdf)
Pandemic Flu - [Ethics & Law](#)

From the BMJ - [Improving Immunization levels](#).
[Shortage of Vaccines!](#) Wall Street Journal Article

Recent issues:

[When to quarantine](#) (pdf) Jan 2006

[Hepatitis-A Vaccine added](#) (pdf)

[Kissing & meningitis](#) (pdf)

[Ask the Experts](#), HPV Vaccine

[HPV Cervical Vaccine](#) (KFF Website)

[National Immunization Awareness Month](#)

August 25, 2006, Imperial College London, [Formalin may not be safe for vaccines](#)

[Whom would you believe?](#)

A Multitude of [Vaccine Benefits](#), Yet Controversy Persists (2008)

For your bookshelf: [Autism's False Prophets](#). Paul A. Offitt MD, 2008, Columbia University Press.

[Bookmarks](#)

Community Assessment Objectives

Week 3

Students should be able to

- describe why community assessment is important for analyzing community health status
- describe the sources the data available for such analysis
- describe how to, how to gather and present the data that affect community public health policy & funding
- describe how to to use spreadsheet and geographic analysis presentations to strengthen their presentations.
- describe data sets available to measure health status at the national, state and local level
- how to link them health data to economic status
- how to access the health care and medical care data systems and their interfaces between public & private resources.
- GIS Objectives:
After this session students should understand the added value of epidemiologic analysis using GIS and geocoding software. They should understand the expanding use of census tracts for analyses. They should be able to explain where they can obtain data. They should understand the elements of enhanced data quality provided by GIS-related tools. They should be able to describe the major software available, including common use within the public health community.
- [Competencies](#) 1C(1,2,4,7,8) 1E (1,2,3,8,10) 1F(All) IIA (1-4)

Key Words

Community, jurisdiction, health status, health measurement, planning, goals, birth rate, infant death rate, fertility measures, community surveys, behavioral risk factors, mental health, Marc Lalonde, Kerr White.

GIS KeyWords: Maps, streets, block groups, census tracts, zip codes, ZCTA, geocoding, spatial analyses, Analysis/Visualization/Reporting (AVR), Census Bureau, Tiger files, choropleth.

Concept

Improving health outcome depends on knowledge of current health status rather than responding to medical crises.

GIS: Epidemiology concerns the distribution of disease with a space and time continuum. Geographic information systems (GIS) allow a visual display of data distribution, as well as affiliated attributes, at varying levels of geographic granularity. Additionally, GIS is being used to enhance data quality management and improve our understanding of socioeconomic factors related to public health surveillance. The use and need for GIS tools and spatial analyses of public health data is increasing, as is evidenced by the growing body of GIS-related literature.

Readings:

[Essay # 3](#), & scan [essay #6](#).

Schneider 2nd Edn: [scan](#) Chapter 5, 8, 11 and 24

Virginia [Center](#) for Healthy Communities

Kaiser Family Foundation: [State Health Facts](#)

GIS Readings: The National Association of State and Territorial AIDS Directors (NASTAD) [Prevention Bulletin. June 2007](#). Read the first four topics below.

Targeting Populations Using Geo-Mapping and Social Network Strategies

- [How do we target populations?](#)
- [Geo-Mapping](#)
- [New York City's Experience with Geo-Mapping](#)
- [Virginia's Experience with Geo-Mapping](#)
- Welcome to [ESRI Public Health Page](#), Scan the options for education and case studies in the left hand column

GIS Optional readings:

Monmonier, M. 1991. *How to Lie With Maps*. The University of Chicago Press.

Monmonier, M. 1993. *Mapping It Out*. The University of Chicago Press * Monmonier, M. 1997. John Snow's legacy. *Cartographies of Danger: Mapping Hazards in America*. The University of Chicago Press. Ricketts, T.C. and L.A. Savitt, W.M. Gesler, et al. 1997. *Using Geographic Methods to Understand Health Issues*. (AHCPR Pub. No. 97-N013). Rockville, MD: Agency for Health Care Policy and Research (NTIS No. PB97-137707). Koch, T. 2005. *Cartographies of Disease: Maps, Mapping, and Medicine*. ESRI Press. Wade T. and Sommer S. ed. 2006. *A to Z GIS: An Illustrated dictionary of geographic information systems*. ESRI Press. Cromley & McLafferty. 2002. *GIS and Public Health*. Guilford Press.

GIS Additional Readings:

- 1. Maxcy Rosenau 13th Edn. Chap 40 & 66. 14th Edn, Scan Chap. 32 & 43 and 70 Secn. C
- 2. Millman M. ed. *Access to Health Care in America*. National Academy Press (IOM), Washington DC 1993. pp 31-45 (Chap. 2)
- 3. Bozzetta SA et al. (1998) The care of HIV infected adults in the United States. *New England Journal of Medicine* 339(28): 1897-1904
- 4, Pappas G et Al. (1993). The increasing disparity of mortality between socioeconomic groups in the United States. 1960 and 1986. *New England Journal of Medicine* 329(2): 103-109
- 5 . [MAPP](#) – a strategic approach to community health improvement
- 6 . [Principles](#) of Community Engagement.
- 7. A new Perspective on the Health of Canadians, Marc Lalonde. 1974

Articles

- Geography gaining power as a tool for shaping health and social policy. 1997. *Advances: The Quarterly Newsletter of the Robert Johnson Wood Foundation*, Issue 3.
- Rushton, G. et al. July 1995. A geographic information analysis of urban infant mortality rates. *Geo Info Systems*. 52-56.
- Tempalski, B. and S. McLafferty. June 1997. Low birthweights in New York City: using GIS to predict communities at risk. *Geo Info Systems* 7, 6: 34-37

• Community Assessment Presentation

Data Sources

In the mid 1970s (revs. 1995) Ivan Illich's book "[Medical Nemesis](#)" sub-titled "The Expropriation of Health" was published. His thesis was to decry the tendency to name every symptom as a discrete entity and develop an ICD-9 code for it, thus increasing the complexity of medical care unnecessarily, and making health assessment difficult. Look at the CDC Web Page on [Assessment in Public Health](#)

In 1983, [Marc Lalonde](#), then Minister of Health for Canada proposed the "Health Field Effect" No up to 75% of a community's health was affected by behaviors, rather than medically treatable diseases. This started the current impetus to look carefully at the whole community environment, including behavior/mental health, not just obvious treatable entities.

Review this video of a [global assessment](#) of health status

The session has three presentations. One by Dr. Buttery, one from VDH Staff and one by Dr. Bradford. Dr. Buttery will introduce the use of geographic communities ([slides](#)) ([handouts](#).) New VDH Staff will provide an introduction to GIS use in Community Assessment. Dr. Bradford's presentations will focus on the assessment of communities where the community is defined by a *population with shared characteristics* such as AIDS, sexual preference or Lung Cancer. Also, one of Dr Bradford's associates, Dr. Kirscht, has recently completed an [assessment in S.W. VA](#). This study is similar in scope to the report by Dr. Buttery's study of the Southside AHEC. You should compare the two and consider that Dr. Barrett's study was funded in excess of \$200,000, while Dr. Buttery's for the AHEC was funded for \$7,500, had to use secondary data and was completed in 8 weeks.

If you don't know where you are going, you are not going to be able to measure a result which would indicate the activities that will enhance the community's health. This is similar to the medical care providers who are so busy treating diseases that few of them take the time to prevent the diseases which they treat. Additionally, national and state legislatures only give lip service to funding prevention. This sends a strong message to insurers, that it is not worth using their money to prevent disease.

What evidence is there that diseases are preventable? Where would you look? What proportion of diseases might be preventable? Why? [Again, look at Data Sources](#)

The World Health Organization's [definition](#) of 'Health' includes attention to physical, **mental** and social well-being, not just absence of disease.

Work through Dr. James May's [slides](#) ([pdf copy](#)) on definitions and parameters of major mental health problems affecting the population. Consider how many friends and relatives you know who have been diagnosed with and/or treated for one of these conditions. Consider the resources that should be included in a community assessment to deal with these problems. Think about Illich's comments on medical diagnoses and statements in the media that 1 in 4 people are mentally ill.

Review two assessments performed by Dr. Buttery where the population assessed were geographically defined rather than disease attribute defined.

The [1973 Assessment](#) was performed for the City of Portsmouth, Virginia. The data was collected and analyzed manually. The [1998 Assessment](#) for 17 counties in Southside Virginia was performed using computer analysis by downloading data from the Virginia Center for Health Statistics, then analyzing a combination of spreadsheets, databases and GIS (geographic Information Systems) projections. For more information on GIS applications click on the [Introduction to Mapping](#) resources

These assessments consider the following issues:

How long does the population live?
How well do they live?
How much disability do they have for how long?
What are the extremes of health and disability in the community?
What seem to be the underlying causes of ill health?
How do you define 'ill health'?
What can be done to change health status?
Whose health status are you going to affect?
What are the costs and the benefits?

How long will change take?
Are these change medical or social?
Is there a difference?
What is measurable?
Are you sure it is measurable?
What role does the environment play?
Who will pay for it?

Once you believe you have answered these questions:

How are you going to plan interventions to change health status?
Whose permission do you need?
What are the constraints to your actions?
Who must be involved in the change?
What can enable the changes?

For an example of a community assessment, scan the [AHEC summary](#) of the community assessment performed in 1998, from which several of the slides in the 1998 slide show were chosen why the recommendations might be unexpected.

Finally, look at the following annual reports written to a city manager more than 25 years ago. the director's first position after completing his MPH. Which issues still remain important public issues today? Why?. How do you think we could resolve them before another 25 years pass by. Consider how useful these annual assessments of policy accomplishment were for the health of residents? What contributes to these assessments? Examine what happened with the grant program over this 6 year period.

[Annual report for 1970](#)
[Annual report for 1973](#)
[Annual Report for 1974](#)

Readings for to this session, Essays [3](#) & [6](#) (scan only)
Schneider: Chapter 8

[Community Assessment Bookmarks](#)
[Intro to GIS](#)

Home site Water and Sewage

Week 4 Part1

Objectives:

Students will be able to describe

- Health department programs that ensure access to safe drinking water
- programs that ensure safe disposal of wastes
- Describe interdependence of wells and private sewage disposal systems on individual home sites
- [Competencies:](#) 1B(1, 2, 7, 8)

Key Words

Ground water, Surface water, Community Water Systems, Community Waste Treatment systems, Septic Tanks, Wells, Federal Standards, EPA, Pollutants, Action levels, Primary treatment, secondary treatment, tertiary treatment, filtration, distribution systems, water reuse, potable water, SWDA, contaminants, water quality, purification.

Concept.

Control of environmental hazards are basic tools to ensure health of the community. The focus here is on rural home sites.

References:

Maxcy Rosenau 13th Edn. Chapter 35. 14th Edn. Chapter 17

Note: Public Water & Sewage systems will be covered in Dr. Vance's environmental health class.

Read:

PDF file on [Sewage Strategies](#).

Introduction to Public Health, : Schneider, 2nd edn, Chapter 19, p 333-335, Chap 21

Turnock, B: Essentials of Public Health-pp 155-158

Buttery [Essay 8](#), section on environmental issues , look at waste, water issues and local control policies

Then view Mr. Price's [Power Point Show](#).

[Well/Septic Tank Bookmarks](#)

Part 2 Genetics

Genetics

Assignment prior to class:

Review the following web site - Advocating for Folic Acid: A Guide for Health Professionals (www.folicacid.net)

Read: (Remember to access journals through the TML Ejournal web-page)

Breast Cancer Mythology on Long Island (August 31, 2001) New York Times, Section: A; Pg. 14 (NYTimes.com)
Read Sung et al (March 12, 2003) Central Challenges Facing the National Clinical Research Enterprise. *JAMA* 289:1278-1287

The Role of [Genetics in the Provision of Essential Public Health Services](#): Wing G. & Watts C. *AJPH* April 2007, V94 #4

Scan the following:

[Home Test Kit](#) causes controversy

Can [Family History](#) be Useful?

[Marfan's Syndrome](#) (June 08)

[Flour Fortification](#) with Folic Acid

[Genomics & Primary Care](#) (Also applicable to the session on aging.)

[The Genie is out](#) (Editorial from NEJM, Jan. 2008)

[Pharmacogenomics](#) — Ready for Prime Time? (Editorial NEJM Mar 2008)

[Supplements Containing Folic Acid](#) (CDC 2007)

Objectives:

Upon completion of this session the students should be able to:

- describe the role of Genetics for Public Health policy and programs
- describe the public health pyramid with regard to genetic information and services
- describe genetic components of health and disease
- describe the relation of genetics and mental retardation
- describe the potential impact of genetic research on community health and preventive medicine

Key Words

- Autosomal dominant-- genes that exhibit their effects when only one altered copy is present (e.g. neurofibromatosis, Huntington disease, many cancer susceptibility genes like RCA1/2)
- Autosomal recessive-- genes that exhibit their effects when two altered copies are present (e.g. sickle cell anemia, cystic fibrosis)
- Birth defect -- any morphological abnormality present at birth (e.g. cleft palate, neural tube defect)
- Cancer cluster -- a greater-than-expected number of cancer cases that occurs within a group of people in a geographic area over a period of time
- Congenital anomaly -- a defect that is present at birth (considered synonymous to "birth defect")
Folate -- a vitamin that plays a vital role in DNA metabolism
- Genetic susceptibility -- a tendency to a disease or health alteration based on genetic changes
Human Genome Project- the 13-year (1990-1993) federal project to map the total human DNA sequence of ~30,000 genes
- Multifactorial -- caused by a combination of genetic and environmental factors

- Polymorphism – DNA variation that is not yet known to have clinical significance
- Children with special health care needs – includes all children who have or are at risk for chronic physical, developmental, behavioral, or emotional conditions and who also require health and related services of a type or amount beyond that required by children generally. It is estimated that 18 million children in the United States have these special health care needs (Maternal and Child Health Bureau)
- Teratogen – any agent that increases the incidence of congenital malformations (e.g. thalidomide, accutane)

Concepts:

- It is estimated that influences on health and disease are 40% behavioral, 30% genetic, 20% environmental, and 10% health care.
- The human body contains ~30,000 genes typically packaged for cell division in 46 chromosomes.
- Genes help determine our responsiveness to environmental changes. Genes also interact with one another. Differing genes, polymorphisms, and genetic susceptibilities show varied responses and interactions.
- The causes of birth defects include chromosomal alterations, Mendelian conditions, teratogens, and multifactorial conditions.
- 3-4% of children are born with a birth defect.
- 239,900 children in Virginia are estimated to have a special health care need.
- The Centers for Disease Control (CDC) recommends that all women who may become pregnant take 0.4 mg. of folic acid daily at least one month prior to conception.
- Many mental retardation problems may be avoided by the study of genetics.
- Family history is increasingly being valued as a public health tool to screen for common diseases.
- “We are all diseased, just not diagnosed yet.” Francis Collins, Director, National Institute for Human Genome Research

**Joann Bodurtha M.D., M.P.H.
John Quillin Ph.D., M.S., M.P.H**

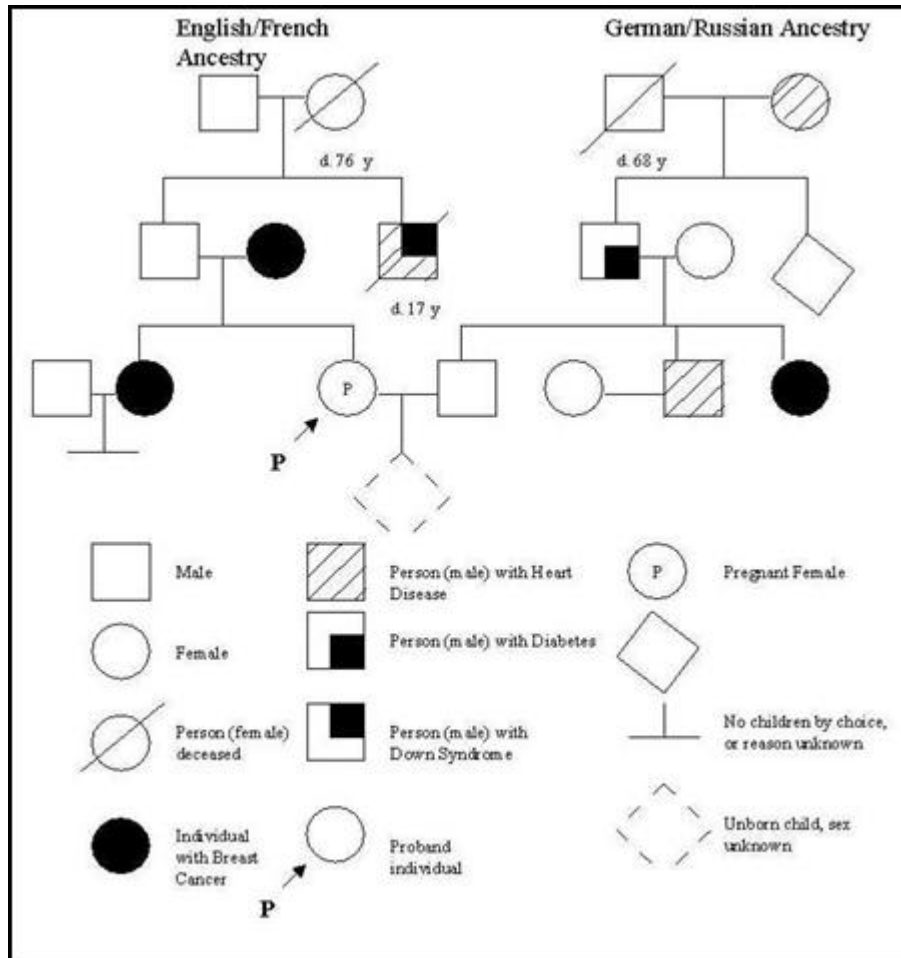
[\(PDF Water & Genetics\)](#)

Reading: Schneider, 2nd Edn. Chapter12
[Newborn Screening](#) - Current Status (pdf)
 Genetics Awareness [Check List](#)

Background Concepts: How to Use an Article About Genetic Association:

[Part 1](#)
[Part 2](#)
[Part 3](#)

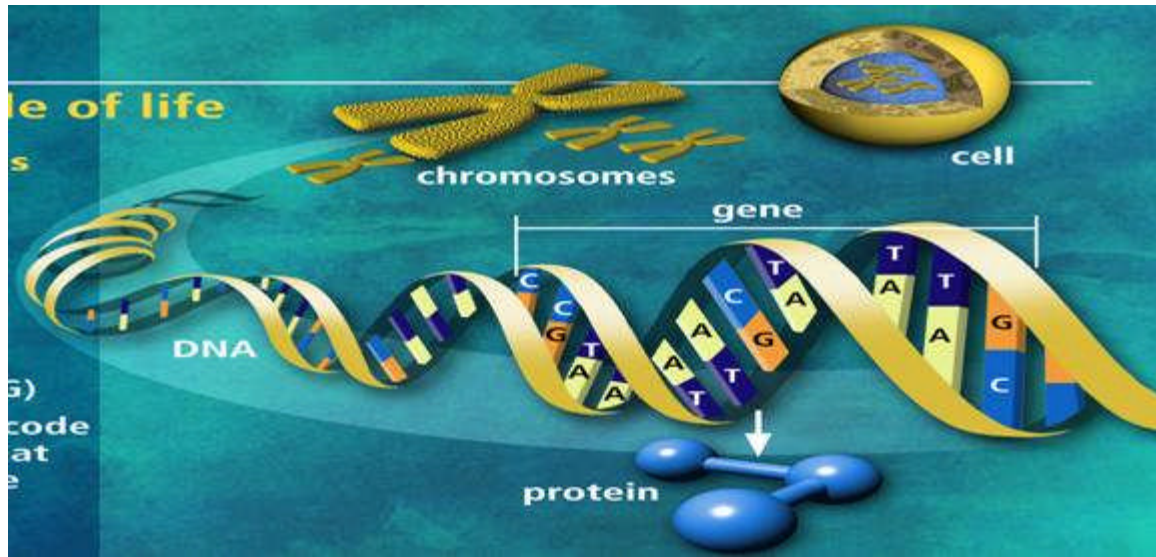
This class on genetics and public health will use a case-based approach to help you learn about contemporary issues at the intersection of public health and genetics. Our overall goal is to encourage you to recognize the genetic aspect of public health problems. Just as learning about infectious organisms two centuries ago altered public health practices, from sanitation to immunizations, new knowledge and technologies in genetics are altering and will continue to impact public health practices. Genetic information influences health and disease across the life span, from preconceptional genetic counseling and fortification of flours with folate to improvements in our understanding of causes of death and disability, from newborn hearing screening where over half of congenital hearing loss is genetic to recognition of the familial risk factors inherent in, for example, Alzheimer disease, cancer, coronary artery disease and stroke.



Pedigree Documenting Family Health History

An ongoing challenge for public health personnel is to incorporate current understanding of the science of health and disease in effective and ethical public health measures. Your own understanding of the relevance of the genetic components of your family health history to your own health and your willingness to think about these complex issues for society and public health are both part of your legacy. Think genetically.

Genetic Material (DNA), Packaged as Chromosomes, Encodes Proteins and Cellular Materials that Influence How Cells Grow and Develop.



The National Coalition for Health Professional Education in Genetics (www.nchpeg.org), a coalition of more than 120 health professional organizations, and the CDC (<http://www.CDC.gov/genomics/training/competencies/default.html>) have developed a set of competencies in genetics for health professionals and for the public health workforce. Review these competencies and continue to reflect upon them as you go through your MPH program.

The following have been identified as public health functions relevant to genetics:

- public health assessment
- evaluation of genetic testing
- development, implementation,
- evaluation of population interventions; and
- communication and information dissemination.

Critical issues include:

- partnerships and coordination
- ethical, legal and social issues; and
- education and training.

[See: *Genetics and Public Health in the 21st Century* (Muin Khoury, Wylie Burke, Elizabeth J Thomson (eds.), New York, Oxford University Press, 2000) is a comprehensive monograph about using genetic information to improve health and human disease.]

The following web sites may be useful for your further study.

- [Genetic Alliance](#)
- [GeneReviews](#),
- [Genetics Home Reference](#)
- www.marchofdimes.com
- National [Human Genome Research Institute](#)
- National [Coalition for Health Professional Education in Genetics](#)
- [Office of Genetics and Disease Prevention](#)

- [Online Mendelian Inheritance in Man](#)
- [U.S. Surgeon General's Family History Initiative](#)

Birth defects: Case 1 - Your sister has just found out at 16 weeks of pregnancy that she has a fetus with spina bifida. Describe the levels of the maternal child health pyramid that impact how this is handled.

The lecture (see Birth defects and the maternal child health pyramid.ppt) will challenge you to consider how the management and prevention of birth defects with a genetic component requires the interplay and cooperation of the various levels of public health service. You are encouraged to review the following web sites related to birth defects and folic acid and keep the following questions in mind.

Birth defects:

1) MMWR Sept 19 2008:Impact of Expanded Newborn Screening — United States, 2006

2) National Center for Birth Defects and Developmental Disabilities

www.cdc.gov/ncbddd/

3) National Birth Defect Prevention Network

www.nbdpn.org

Folic Acid:

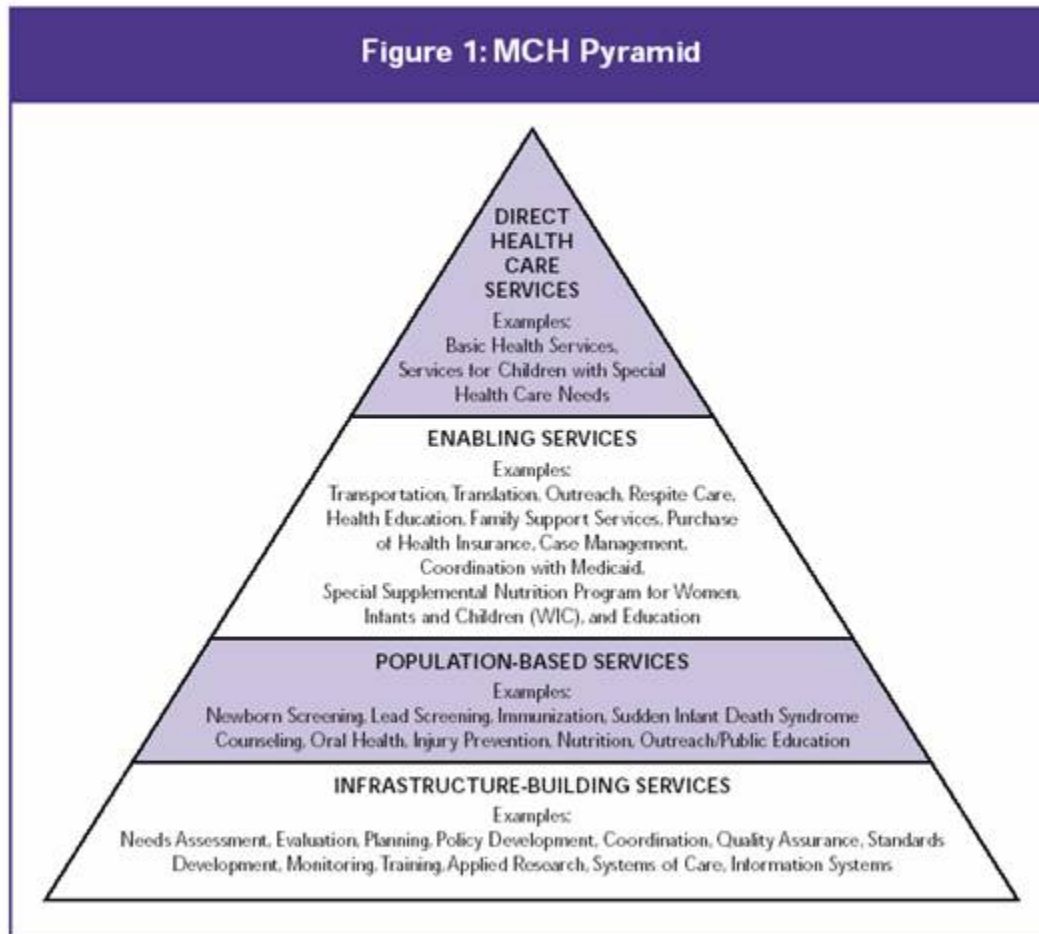
1) Advocating for Folic Acid: A Guide for Health Professionals

www.folicacid.net

2) National Council on Folic Acid

www.folicacidinfo.org/about_us.php

Maternal Child Health Pyramid:



MCH Bureau [Definitions of Core Public Health Services and Key Words](#)

1. **What are the needs of individuals with birth defects?**
2. **How do direct health care services help to meet these needs?**
3. **How do enabling services help to meet these needs?**
4. **How do population-based services help to meet these needs?**
5. **How does the public health infrastructure help to meet these needs?**

Lecture - [Birth defects and the maternal child health pyramid \(.pdf\)](#)

Cancer: Case 2 - Your next-door neighbor tells you that 2 of her 4 daughters have recently been diagnosed with breast cancer. You all grew up together and are worried about the "cancer street." Describe how public health and genetic help you address risk assessment.

With the completion of the Human Genome Project inherited risk factors are increasingly being identified as contributors to common chronic diseases. As clinical testing strives to keep up with research advances in genetics, public health officials are recognizing the value of family history as an important screening tool. In this part of the lecture (see The Genetic Component of a Common Disease.ppt) we use the example of cancer and cancer clusters as a paradigm for the inherited genetic contribution to common diseases, and we discuss the incorporation of genetic information into public health investigations of these diseases.

After exploring these web sites

- **CDC [National Center for Environmental Health](#) (Cancer Clusters)**
- **Mid-Atlantic Cancer [Genetics Network](#)**
- **[Office of Genomics](#) and Disease Prevention at the CDC**
- **[National Cancer Institute](#)**
- **Virginia Department of Health ([Cancer Registry](#))**

think about possible answers to the following questions:

1. Why is it important for a public health official to know about family health histories?
2. What are potential barriers that limit what public health investigators can learn about family health histories?
3. How is genetic susceptibility screening different than traditional public health screening tests like tuberculosis screening or smallpox screening with respect to:
 - a. Disease symptoms (present/absent)
 - b. Insurance, employment discrimination
 - c. Who else is at risk?

Lecture - [The Genetic Component of a Common Disease \(.pdf\)](#)

Health manpower: Case 3 - You are a health planner and suddenly learn that there are no nutritionists in the state who have training in handling infants who are diagnosed on newborn screen with metabolic disease. Describe how you would address this need.

This lecture (see Health manpower and newborn screening.ppt - below) will take you through one public health geneticist's approach to this question. You are strongly encouraged to choose one of the current [*for example: sickle cell and hemoglobinopathies, phenylketonuria (PKU), maple syrup urine disease (MSUD), homocystinuria, hypothyroidism, biotinidase deficiency, congenital adrenal hyperplasia (CAH)*] or *medium chain acyldehydrogenase (MCAD)*] conditions screened for in Virginia at birth and review the following web sites to answer the following questions. (Look at the conditions now included as the result of the 2005 General Assembly actions, the simplest way is to go to the VDH Genetics Program web site and look at [What's new](#))

www.aap.org (Pediatrics 2000 Aug; 106:92 pt 2)389-422. Screening the family from birth to the medical home. Newborn screening: a blueprint for the future - a call for a national agenda on state newborn screening programs)

<http://genes-r-us.uthscsa.edu> (National Newborn Screening and Genetics Resource Center, 2000 National NBS report)

www.geneticalliance.org (national coalition of genetic support groups, useful for getting information on a particular genetic condition by going to the particular condition's support group's web page)

www.marchofdimies.com (look for information sheets for parents)

1. Why is the condition screened for at birth?
2. How many children on average are born annually with this condition in Virginia and in the United States?
3. How is the condition treated?

4. What are the issues involved in informed consent/dissent for newborn screening?
5. What needs to be in place for an effective newborn screening and follow-up system for this condition in Virginia?

Lecture - [Health manpower and newborn screening \(.pdf\)](#)

Late Breaking Reading

The [Role of Genetics](#) in the Provision of Essential Public Health Services
Where [Risk and Choice and Hope Converge](#), a Guiding Voice

[Genetics Bookmarks](#)

Epidemiology - Surveillance.

Objectives

Part1

Dianne Woolard Ph. D.

([pdf version](#))

Upon completion of this seminar the students should be able to describe

- principles of disease surveillance in the community.
- the most prevalent conditions
- the role of a health agency in intervening to prevent or delay onset of, or provide early intervention to reduce, deteriorating health status of various population groups.
- Purposes of surveillance to detect onset of acute infectious disease
- The capability to estimate changes in incidence and prevalence of chronic diseases.
- [Competencies](#): 1A(1-4,9) 1C(1,3,4,8,10) 1D(2,8) IIA (1,4,7)

Key Words

Community Surveys, Passive & Active surveillance, Chronic Diseases, Environmental Hazards, Denominator data, Numerator data, Prevalence, Incidence, and examples of epidemiologic investigations.

Concept

Chronic non-infectious diseases are as amenable to epidemiologic evaluation and intervention as acute communicable disease. Both types of disease require use of surveillance.

References

Introduction to Public Health, Schneider, 2nd Edition Chapter 4, Pages 74-82.

[Smoking Trends](#) from the BMJ

CDC's [Epidemiology Program Office](#)

Division of [Public Health Surveillance](#) and Information

List of [Case Definitions](#) from the CDC (look at latest definitions of several common infectious diseases to evaluate similarity and common items in case definitions.)

[The Cochrane Library](#) is being used increasingly by those interested in Surveillance. It is in many respects the Gold Standard for surveillance methods.

examine the [USPSTF web site](#) and see if you can find some recommendations on screening from this [part of the site](#).

Epidemic Intelligence Service [EIS](#) (to get a valuable experience after the MPH)

WHO's Department of [Epidemiology Programs](#) (look at the WHO surveillance programs and their scope)

CDC's Behavioral Risk Factor Surveillance System ([BRFSS](#)) Many of you will use BRFSS data for your final projects prior to graduation. In particular look at the BRSS [chronic disease page](#) and the [Youth Risk Behavior Surveillance](#) — Selected Steps Communities, 2005

Those of you with an interest in Cancer Epidemiology might want to look at the [Maps available from the NCI](#)

[Surveillance Bookmarks](#)

[Go to Power Point Presentation](#) ([pdf file](#))

Part 2
Dr. James Mays Ph.D.

Mental Health Services Funding.

Surveillance of community mental health services has identified significant unmet needs. These needs arose after the state decided to move patients out of institutional settings into community based services programs, but failed to transfer funds with them. This is typical of state line item budgeting where budgeters look at expenses for lines of services (food service, doctors, nurses, facility maintenance) but fail to look at program needs such as costs to provide services necessary for a group of patients. This failure has led to reduction in mental health costs, and abandonment of many patients discharged from facilities, who because of lack of services, end up as vagrants/homeless persons.

Dr Mays discusses funding Issues in [this slide show](#) ([pdf File](#))

Introduction to Aging : James J. Cotter Ph.D. & Kim Buttery

Objectives

[pdf](#)

Students will be able to

- describe the role of public health in dealing with a special population, the senior citizens
- describe the criteria for labeling a person aged
- describe the elements of aging
- describe governmental agencies responsible for assisting/ measuring aging
- describe non governmental agencies who assist aging persons.
- describe how ageing can be expected to affect public health services over the next 25 years.
- [Competencies](#) 1C (1,2, 7,8) !D (1,2,3,5,7,10) 1E(1` ,4,6,9) IIA (1,2,3,4,)

Key Words

Aging, aged, seniors, nursing homes, homes for the aged, retirement centers, senior citizens advocacy, home visiting, senior centers, mental health and aging, Alzheimer's diseases, Parkinson's disease, Osteoporosis, chronic diseases.

Concept:

Aging starts at birth. Getting older is not necessarily accompanied by significant declines in either physical or mental function. There are many resources available to assist people as they age. Misunderstanding and lack of knowledge is the greatest detriment to health maintenance while aging.

References:

Schneider 2nd Edn: Introduction to Public Health - Chapter 28

Consider The UK definition of aging, the second heading on the page - [Ageing and the Life Course](#).

[Data from the US Census Bureau](#), August 2008: the 85 and older population is expected to more than triple, from 5.4 million to 19 million between 2008 and 2050.

Future Implications

- The social and economic implications of the aging of the Baby Boom generation will be a significant concern for policy makers, the private sector, and individuals. The size and longevity of this group will trigger debate about possible modifications to Social Security, Medicare, and disability and retirement benefits, among other issues. What is happening to the [population pyramid](#).
- The changing marital and family composition that is occurring in the United States is likely to change the types of familial support that are available to people at older ages.
- The future older population is likely to be better educated than the current older population, especially when Baby Boomers start reaching age 65. Their increased levels of education may accompany better health, higher incomes, and more wealth, and consequently higher standards of living in retirement.
- Older women will be increasingly more likely to have been in the labor force long enough to have their own retirement income, although their lower median earnings may translate into lower incomes in retirement.
- Research on genetic, biological, and physiological aspects of aging is likely to change the future for

the older population. In the medical and public health arenas, research to understand chronic diseases, such as diabetes and Alzheimer's disease, may produce significant improvements for treatment and prevention.

Think about the [changing use of health services](#) as the population ages and its ramifications. What has happened since the economic depression started in 2007?

Review Dr Cotter's [Slides](#)
([pdf handouts](#))

Review the .pdf file CDC's [State of Aging](#) Report with particular attention to the discussion starting page 26. You may also want to review [the report](#) from the National Association of State Units on Aging and compare its comments with those in the CDC report (pay particular attention to page 3, PH & aging; exhibit 3, page 4; exhibit 8, p 11; barriers to health p12; and discussion page 22-24); . A recent concern has been with [Older Driver Safety](#), see web site.

David Brooks in Frontline "Longer Lives - The [Ties that Bind Us](#)."
DVD- Living Old Excerpts & Discussion, [Web Site](#) The first and last segments are the most important.

TAKING CARE: [ETHICAL CAREGIVING](#) In OUR AGING SOCIETY (this is a large file and will take about 1 minute to download, save it to your hard drive and dip into it as necessary)
The President's Council on Bioethics; Washington, D.C., September 2005
(Scan the Conclusions and recommendations section with attention to highlighted areas- start at p 228 ff.)

WHO - [Long Term Care](#) pp6&7 (Another long file [28mg] to save to your hard drive)
[American dream](#): Live long and prosper
[The Aging Network](#)
[Changing the Nursing Home Culture](#)

New Readings 2009(scan only)
Editorial on Aging [AJPH](#)
[Conquering old age](#) (Editorial BMJ-July 08)
[Baby Boomers](#) and aging
[Who Pays](#) for Long Term Care (Policy Analysis for reference)
[Who Cares](#) for the Elderly
[Dying at Home](#) from Drugs (Fatal Medications)
[Bereavement Adjustment](#) (Sept 08 JAMA)

[2009 Links](#)

For those interested in pursuing this topic further "The Epidemiology of Aging", William A Satariano.
[James & Bartlett](#), 2006

Occupational Health - Industrial Hygiene

Objectives:

Students should be able to describe:

- The role of occupational health practice within the community
- Inter-relation between OH and preventive health practices.
- The major components of occupation health practice
- The focus on maintaining health and preventing disease.
- Why the workplace can be hazardous to the health of individuals
- How OH/IH programs contribute to community health
- Why OH/IH data are part of the surveillance role of the public health agency.
- [Competencies](#) 1B(1,2,3,4,7) 1C(10), 1D(4,10), 1F(1,3,5) II(a)

Key Words

Occupational health, Occupational Medicine, Occupational Hygiene, Industrial Hygienist, Health Hazards, Risk Assessment, Worker health, workman's compensation, Maternal Safety Data Sheets, Right to Know, industrial epidemiology, OSHA, Dept. Of Labor, Environmental Hazards.

Concept

Most people work outside their home and expect their workplace to be free from physical and environmental hazards. The workplace may be the only place where many lower income workers have access to health services.

References

[Return To Work](#) (.pdf file, read with Adobe reader)

Maxcy Rosenau, 13th Ed. Scan introduction of chapters in section 3 (Environmental Health) particular attention to Chaps. 15 pp 315 - 324, Scan chaps. 28, 30 & 31.

14th Ed. Scan Chap 18 Sec. A & C, Sc an Chaps 32 & 33

Introduction to Public Health, Schneider, Chapter 19

Add. Gen. Ref. from Dr Vance - Risk, costs and lives Saved. Getting better results from regulations. Edited by Robert W. Hahn. Oxford University Press. 1996)

New Papers - Take a look at the concern in the UK about responsibility for signing [well](#) (page3) or [sick](#) (page 6)notes. These same issues bedevil the family doctor in the U.S. as well.

[OH-IH URLs](#)

Industrial Hygiene & Carcinogenesis

Drs. Compton, Vance, Buttery

Concept:

The workplace should not expose workers to environments with preventable hazards. The work site should foster a healthy life style.

Key Words:

Work site, occupation, environment, hygiene, hygienists, engineers, Material Safety Data Sheets, Threshold Limiting Values, Personal Protective Equipment, toxicology, safety, carcinogens.

Objectives

of this presentation is to provide you with an overview of the function, and scope of work of the Occupational Medicine physician and the Industrial Hygienist. The two professions complement each other in ensuring a safe workplace for employees.

Relevant [MPH Competencies](#) 1A5, 1B1-8, 1C1-8, 1D3-7, 1F1-5. IIA1-7

Issues

Review the historical data provided in the first session of this course to examine **how long** worker's health has been a concern of health professionals.

First review Slide presentations from Dr Compton.

[The Occupational Health Program](#) ([pdf Version](#))

[Disability Cost/Benefits](#) (.pdf)

[Employer as Health Coach](#) (NEJM Oct07)

[Deaths from Heart disease among Firefighters](#)

Also investigate the following Web Sites to look at information that would be useful in counseling workers about options if disabled as well as general Occupational Med reference information.

[Bureau of Labor Statistics.](#)

[Americans with Disabilities.](#)

[Traveler's Warnings.](#) (Look at the fact sheets on this page)

[Association of](#) Occupational and Environmental Clinics

The following web sites **also** provide important information related to occupational health & industrial hygiene

[NIOSH](#) (there are excellent fellowship opportunities at this site)

[Pocket Guide to Chemical Hazards](#)

[Health Hazard Evaluations](#)

[OSHA](#) (Occupational Safety & Health Administration)

[ACGIH](#) (American Conference of Governmental and Industrial Hygienists)

[NIOSH](#) OH/IH Web sites

Then review the Slides provided By [Dr Vance](#) (.pdf of [slides](#)) Examine the Links to web sites provided by Dr. Vance and be prepared to discuss current occupational health issues.

Then look at the [Primer on Carcinogenesis](#) (.pdf) as an introduction to the issue of chemical effects in the workplace.

American Cancer Society [web page on known & probable carcinogens](#)

Love Canal, Niagara, New York

Triani, (Redstone Arsenal) AL (DDT)

Timjes Beach, MO (Dioxins)

Paint, Corpus Christi Helicopter Rework Depot, TX

The following short pieces should stimulate some thoughts about Asbestos as a carcinogen.
What types of cancer does it cause?
How much exposure is needed to obtain an effect?

1) This first article was one of the first cohort studies in the US.
This set of articles started to concerns following WW!! and became an [issue in the 1950s](#)

Although a number of epidemiologists cautioned that more data was need following the media 'feeding frenzy' it was not until a further review [20 years later](#) when some of the news media harassment died down.

2) The look at the [table from Selikoff's original study](#) and consider what this tells you about the comparative dangers of asbestos exposure and smoking.

3) Then [review the short summary](#) and the indicators for Health Effects Monitoring using the preceding as an example of an issues needing such monitoring.

4) Finally try and [get a feel for what parts per million](#), billion and trillion mean when this kind of data is quoted by the EPA and activists.

**EPID-600 Introduction to Public Health
Rabies & Zoonoses of Public Health Interest & Animal Control,**

Julia Murphy DVM, MS, DACVPM , C.M.G. Buttery M.D., MPH

Objectives

After this seminar students should be able to describe

- **The hazards of rabies**
- **The community programs and surveillance systems used to prevent spread of Rabies.**
- **Other Zoonoses which cause ill health in the community**
- **Zoonoses which are a risk for causing bio-terror incidents,**
- **Dangers from vicious animals.**
- **The community hazards of uncontrolled animal populations including pets and wild life.**
- **Why protecting animal health enhances community health.**
- **Competencies: 1A(3,7,9), 1C(1,2,3,8), 1E(1,6), II1(1-7)**

Concept:

Animals can be dangerous to the health of humans. Epidemiologic investigation of hosts and vectors lead to the control of diseases spread by animals, and can provide early warning on bio-terror attacks.

Key Words:

Pets, Wild Animals, Hosts, Vectors, Rabies distribution in animals, Lyme Disease, West Nile Virus, Other epizootics, Vaccinations, Bite investigations, Animal Control, Veterinary public health.

References

**CMG Buttery - [Essay No. 8](#) Vector & Animal Control,
Schneider, Introduction to PH, 2nd Edn. pp142-149; 176-178
The Ecology of Stray Dogs, Beck, A. York Press 1973 [still the gold standard for understanding feral animals.]**

Updated URLS

Julia Murphy - DVM, MS, DACVPM & C.M.G. Buttery MD MPH

Look at Dr. Murphy's PowerPoint shows (1) [Zoonoses, Handouts](#) (2) [Rabies, Handouts](#). Click on [VDH Web](#) and examine the Rabies Information. Also look at the CDC [Update on Rabies Zoonoses](#). Then, return to the epidemiology home page and select the Fact sheets and examine the fact sheets on Lyme Disease and Tick-borne diseases. Look at the [USGS West Nile Virus Map](#) for various species infections, then look at the bird map and click on Virginia to determine how widespread the WNV is in birds in 2005. Look at this report on [control of Avian Flu](#) in Vietnam. Also, scan the latest [Compendium of Animal Rabies](#) Prevention and Control, **2008**

Bioterror Resources

[JHU Center for Civilian Biodefense Studies](#)
[National Academies Reports on Terrorism and Security](#)
[kaisernetwork.org/healthcast](#)

Using the internet see what you can find about human rabies in the US in the last 5 years. What is the main vector.

Review Dr. Buttery's [PowerPoint](#) slide show ([PDF Version of Animal Control](#)) then visit the following set of links to examine the issues of animal control as a public health and community health issue as you go review the attached information? You will find the answers to the question posed below at these web sites. Also determine what the various sites have in common.

Department of Agriculture, [Dangerous Dog Registry](#)
[Fairfax County Animal Control](#)
[City of Seattle Animal Control](#) (what do both these two sites have in common?)
[Humane Society of the United States](#) (focus on pet care)
[Animal Shelter Information](#)
[Animal Control Officer Training/Standards](#) (what can you find about training standards?)

The controlling law is found in the Virginia Code, in the Title devoted to the Dept. of Agriculture, Division of Animal Health. The director is a public health trained veterinarian. He is responsible for all domestic animals, most of which are found on farms.

Using the Web examine the home pages of the Fairfax County Animal Control and the Animal Control Department of the City of Seattle, Animal Control agencies to view the services they provide and their philosophies of operation.

What are [Feral cats](#). What should we do about them? [AVMA statement](#) on Feral Cats

Wild animals are the responsibility of the [Department of Game and Wildlife](#).

Changes to animal control state law starts in the Committees on Agriculture of the State House or Senate. Can you find out what changes have been made to animal control ordinances in the last 2 years and why?

A serious hazard from domestic animals is Rabies. It can be passed on to herds of cows, sheep etc. With development of cities and depredation by loose (feral) animals, animal bites are now as much a problem as dog/cat-to-human transfer of rabies. Current law requires immunization of domestic animals against rabies. More recently leash laws, standards for kennels, and licensing requirements have developed. Under the state system, localities can only enact local laws when permitted by state law, which limits the amount a locality can charge for licenses. Because of antisocial behavior by many individuals, new laws protect animals from people, not just people from animals. These include codes on care, feeding, housing, and abuse of animals, including prohibitions against animal fighting.

In addition to rabies a wide array of potential pathogens are both carried and transmitted by animals, including Lyme Disease and Psittacosis.

Several cities, including Richmond, have been concerned about the increase in rabies among cats, the move into the cities by raccoons and the presence of large numbers of unrestrained dogs. The desire was to control wandering of all loose domestic animals as well as pay for control of the animals. City staff worked closely with the humane society to get enabling legislation passed.

Should the public at large should pay for animal control by use of user fees (taxes) on animal owners or from the general tax base?

In Richmond, the division of animal control has moved periodically between the police and health departments. In Texas most animal control resided in either local health departments or was contracted to humane societies.

Consider the advantages and disadvantages of where the program lies and how you can encourage community support.

How can epidemiology be used to garner support for improved animal control?

Enforcing animal control laws in the courts is extremely difficult. We have the same problems, in the courts, prosecuting animal control violations that we have with restaurants or septic tanks regulations. If we have to go to court we have been unable to change someone's behavior.

Animals running loose often form packs and attack and bite people.

They also defecate and urinate on public and private property and damage property.
Some breeds are more of a problem than others.
Animal rights groups and the ACLU often prevent protection of the public.

The US Humane society, and its state & local branches, work hard to ensure a fair balance between the privilege of owning an animal versus protection of the public and the animals.

Review CDC advice on preventing [Animal Bites](#). Also the CDC report of nonfatal [dog bites in 2001](#) (note the problem that many federal reports get old quickly. There has been no update on this issue since report was published in 2003.)

Consider the Following Questions:

Which animals in Virginia now present a significant likelihood of transmitting rabies?
What can the community do to protect itself from out of control animals?
What can individuals do?
How could you reduce animal bites? See CDC web page on [dog bite prevention](#)
Who is most likely to be attacked?
Are there circumstances under which attacks may not be illegal?
Why are pets are a hazard to your health?
What diseases can they transmit? What can be done to reduce the hazard?
What is a domestic animal and why is it important to define them?
What animals can be protected by Rabies Vaccination?
What regulations may be available to control non-domestic animals? (Consider Bubba & Sundance).
How would you capture loose animals?
How would you restrain animals?

Latest References:

8 [Dangerous](#) Pets
The [Deadly Dozen](#)
[Eliminating](#) Malaria
A [Rabid Kitten](#) CDC Report

The [Yellow Fever Pandemic](#), a 1901 classic report by Walter Reed MD, reprinted with comments in the AMA

References:

The Ecology of Stray Dogs (A study of Free-Ranging Urban Animals). Beck, A. York Press. Baltimore, 1973 Social Behavior in Animals.

Zoonotic Diseases. Where to go for advice. Animal Sheltering March-April 1996.

Human Rabies in Florida. JAMA Sept 16 1996, Vol. 270 No 11 P 865.

The Black Widow Spider. NEJM. June 5. 1997, Vol. 336, Number 23.

[Bioterror Links](#)

Zoonotic Diseases: Where to go

TIPS FOR PET OWNERS

Pet owners are far more likely to contract most Zoonotic diseases from contaminated food or drinking water than they are from their healthy companion animals. Still, as added precautions, pet owners should follow these Safety tips:

• Take your pets to the veterinarian for routine check-ups and at the first sign of health problems (like diarrhea). • Have your pets dewormed and vaccinated. • Keep your animals and home as free of fleas as possible. • Prevent bites and scratches by teaching children to play gently with pets	• If your pet scratches or bites you, wash the wound thoroughly and apply an antibacterial ointment. (For severe bites or scratches, call your physician.) • Keep your cat's nails trimmed (but do not subject them to declaw surgery). • Wear gloves when scooping or changing litter. • Wear gloves when cleaning up after puppies and removing feces from lawn	• Make sure children wash their hands thoroughly after they handle pets. • Cover children's sandboxes when the children are not playing. • Wear gloves during and wash hands after gardening. • Keep all pets indoors (or under close supervision).
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Food Service Management & State Health Laws **Horace Parham RS, RCDH and CMG Buttery MD MPH**

Concept:

The public expects to be safe from food poisoning when they eat out, and to be free from environmental carcinogens.

Key Words:

Hazard Assessment, Critical Temperatures, Significant hazards, FDA Inspection sheets, Food handlers & food handling, Food at risk, Food borne outbreaks, Manager training & certification, Inspection methods, places inspected, closures, education vs. policing, contamination, outbreak investigation.

Objective:

After this seminar students should be able to describe

- The role of the public health agency in preventing the transmission of food borne illness
- Summarize the policies used to develop food service surveillance.
- The major topics upon which state public health law focuses
- The surveillance role of the local health agency in promoting food safety.
- The role of the Joint Commission for Health Care in developing new programs to improve access to health services.

[Read this material](#) on changes in food safety over last 50 years, from the MMWR FIRST.

Readings:

CMG Buttery - [Essays, No 8](#) Section on Food Service & [Essay 13](#), Laws..
Schneider: Intro to Public Health, 2nd ed, Chapter 23

[Food Bookmarks](#)

Horace Parham R.S., CMG Buttery MD

Food protection:

Start by looking at the diseases [Food Borne Pathogens](#) then at [this chart](#) and then at this link to [Food borne Diseases](#) (have you seen any discussion of these in the MMWR since you have been in the course?). After this you should look at [this chart](#). As well as the items in the next paragraph consider the elements in [this notice](#) and how simple actions can prevent food poisoning. Take a look at the new [Food Service web](#) of the VDH (what was the score for the last restaurant in which you ate? will you eat there again?). Also, for comparison look at the City of Hamilton's [food service site](#). Take a look at the [criteria for inspections](#). Also, to go with Dr. Buttery's slides (See Below) is this VDH .pdf file [Regulations for Food Service](#). (Most of our discussion issues can be found on pages 13 & 14 - Article 4 - Inspections and correction of Violations. Do you think mandatory posting of food inspection scores in each restaurant, visible to the public, would help improve food hygiene within a restaurant?

From the [Chicago Tribune](#), Sept 23. 2008

The VDH web site has completed its food page and the related regulations, statutes and forms, as well as the policies and philosophy. While much of information may be found by looking at the [Food](#)

[Sanitation Related web sites](#) review the reports at the beginning of the food web sites which have been added for this evening's presentation. I strongly recommend scanning all these pages but **look at the [HACCP web page](#) in detail (particularly the plan). The HACCP program is the most important international standard yet developed to protect food from growth to service. In particular look at the HACCP Principles and at least scan the elements within each principle. Then scan appendices E and F, examples of Critical Control Point decision trees.** Be sure you understand how a HACCP plan is developed and the [7 guiding principles](#). See also The FDA [web page on HACCP](#). Finally review the USDA's Food Safety Inspection Service (FSIS) [Web Page](#).

Review [Dr. Buttery's Power Point](#) slides, [Slides for printing](#),. Slides [for 2008](#) Handouts. One of the best sets of slides from the food safety web is that from the [Minnesota Department of Health](#)

Consider the Food Safety Education for the public [web page](#) and consider how this information could be used to improve food hygiene in places that cater to the public in Virginia.

Read this on [Bottled Water](#)

SCan: Food safety from [Farm to Table](#)

Additional Reading:

An Important Text,(April 2003), available from the IOM: [Scientific Criteria to Ensure Safe Food](#) Review the Executive Summary. Think about this in relation to the current protracted news media rants about salmonella and tomatoes.

Health Laws of Virginia

A Commissioner's Perspective

C.M.G. Buttery MD MPH

You will be taught public health law in a course by Dr. Vance. He will give you the technical details of the laws that govern public health from Federal through state and local laws.

This session gives you an overview from the Health Commissioner's and local health director's viewpoints.

[Click Here](#) to obtain an overview of the process for making state health laws,

When State Health Commissioner, I could only enforce laws that came to me through the State Legislature. I had no authority to enforce health laws based on federal statutes, unless these statutes were codified into state law or adopted as part of a state law.

For example, the FDA enforces federal law regarding food safety, I could only refer violations to federal agencies unless the state had not adopted its own statutes in Title 35 of the Code of Virginia.

State Health Code, Title 32 of the state code, now has 8 chapters. There used to be 2 more for management of Medicaid, but they were removed from the health code and transferred into administration when Medicaid became a separate state agency in 1986. In addition to the Health Code there are statutes in the other titles of the state code that require action of the health department, either by direct enforcement or by cooperation. ([Code Titles](#) in Chapter 32 of the state code)

Chapter 1

Organization and administration of the department as well as the appointment of the Commissioner and members of the Board of Health, also the organization of local health departments. This chapter sets standards for the selection of the Commissioner and the structure and functions of the State Board of Health which, in Virginia, is an advisory board to the Commissioner. In Texas, this is an administrative board. It selects the commissioner, with no oversight from the Governor.

What benefits or drawbacks do you believe might accompany either process?

Chapter 2

Focuses on disease protection and dwells on immunization standards and reporting of communicable disease. Any changes to the immunization schedule have to be approved by the Board and pass through the "Administrative Process", unless deemed an emergency, and approved as such by the Governor.

What considerations do you think the Commissioner must consider before placing a disease on the list for either immunization or reporting?

Chapter 3

Medical Care services deal not with a state medical care system, but with public health, and focuses on Maternal and Child Health (including licensing of midwives), the Virginia Voluntary formulary and the hemophilia program.

During Dr. Tweel's MCH presentation you will hear discussions of women's health problems and child health. Most of the discussion was on programs. What oversight would the Commissioner want and how would it be exercised?

Chapter 4

Health Planning, deals with the Certificate of Need Program (COPN), health planning and resources development, a State Health Coordinating Committee and regional perinatal services.

What evidence have you seen of health planning? What is COPN supposed to accomplish? How effective has health planning been in Virginia? What is the current emphasis of health planning in the State Health Department?

Chapter 5-

Licensing of Medical Care Facilities focuses on hospitals, nursing homes, Home Health Agencies, Hospices, EMS programs and blood bank licensing. These actions are necessary for the institutions to obtain federal reimbursement.

What Federal Act prompted this oversight? Has Federal oversight improved the quality of care? How can you measure the effectiveness of this oversight?

Chapter 6

Environmental Services regulate sewage disposal, water supplies, hazardous wastes, mosquito control, migrant camps, radiation control, and toxic substances information

How is enforcement achieved for most programs? When do you resort to use of the courts?

Chapter 7

-Vital Statistics: births, deaths, adoptions, name changes, marriages.

How important is collection of these data, why is timeliness important, how can collection be improved?

Chapter 8

Postmortem examinations and medical examiner system.

What is the difference between a Medical Examiner system and a coroner system? What are the benefits of a post-mortem examination?

In addition to responsibilities outlined in the Health Title of the state code are statutes that ensure payment to universities and colleges for training health providers and in

Title 28.1

Covers responsibility for Fish, Oysters and Shellfish managed by the environmental health division.

Title 29

Contains laws related to rabies control, responsibility of animal and game wardens, care of pigeons and laws barring fighting animals. If the local health director has responsibility for animal control the ruling codes are found here.

Title 35

Controls campgrounds, tourist establishments, and restaurants for which the Commissioner of health promulgates standards such as those for food preparation services (which you have already heard discussed tonight.)

Title 40

Labor law involves the Health Commissioner's expertise and advice about toxic chemicals

Title 54

Provides guidance the Commissioner guidance in the use of health professionals in Health Department programs.

Title 62

Defines the relationships between the health department and the departments found in the secretariat of natural resources.

In addition to the above are various commissions on which the Commissioner or delegated staff members sit to give advice such as:

The Developmental Disabilities Council
The Solid Waste Commission
The Migrant Workers Commission
The Health Services Cost Review Council
The Hazardous Waste Services Act Board
The Council on the Environment
An Agency, which provides Sewer and Water, loans to localities
Soil Conservation Districts
The Virginia Water Resources Research Center at VPI
and the Virginia Institute of Marine Sciences.

Reading: Gostin Larry O.: Public Health Law: Power, Duty, Restraint. University of California Press Ltd. 2000 Chaps: 1 & 4. **[Note: This book is the required reading for Dr. Vance's Course on PH Law]**

Additional references:

[Food Service URLs.](#)

Primary Care & Public Health - The Interface

Stephen F. Rothemich M.D., C.M.G. Buttery, M.D., MPH, Michael Evans M.S.W.

Objectives

Upon completion of this session the students should be able to describe

- The distribution of common diseases within the community,
- The role and relationship of primary care physicians to medical consultants and the public health support system.
- The scope of primary care and the role of prevention in primary care practice.
- Development of a plan to improve the number and distribution of primary care physicians,
- How the plan could change the role of community public health agencies and the potential to improve community health status.
- How the Virginia Health Care Foundation and Virginia Primary Care association contribute to primary care access.
- [Competencies](#): 1A(1,2,8) 1C(1,2,4,) 1D(1.2.4.6.7.8.10) 1T(1-5), IIA(1-7)

Key Words:

Primary Care, Public Health Intervention, Primary Care Physicians, Health Systems, Geographic mal-distribution, Third Party Reimbursement, Rural/Urban distribution. ICD(a) & ICHPPC codes. Recruitment, Retention, Physician Need, Practice Patterns, Case Management, Referral, Integrated Human Services, future health practice systems, health data analysis. [AAFP](#) & [IOM](#) definitions

Concept:

Primary care and public health are two complementary facets of community based care that improve health status.

References:

Instructor Handouts.

[Bookmarks](#) for 2008

Maxcy Rosenau

12th Edn. Chap 1 & 65.

White K. L. "The Ecology of Public Health" NEJM 1961:263: 18, 885 - 892

The Contemporary "Ecology of US Medical Care" Confirms the Importance of Primary Care - [Kerr White Updated](#) (.pdf format)

Schneider: Introduction to Public Health, 2nd Edn. Scan Chapters 25 and 26

General reference: R. Rakel - Family Practice,

Review this site [about patient safety](#) as a primary care & public health issue.

Also, review the discussion by Dr. Berwick given at the IOM Annual Meeting 2000: Quality of Health and Health Care. Consider how what he says might change primary care delivery. ([.pdf](#))

Dr. Stephen F. Rothemich MD, CMG Buttery MD, Michael Evans MSW.

Focus on Primary Care - **The Interface with PH & Preventive Medicine**

Start out by Reviewing [Dr Rothemich's Presentation](#) [[Handouts](#)].

Then look at the [Family Medicine research site](#) to consider the types of research being conducted, where the studies fall in the array of the epidemiologic armamentarium. Are they descriptive or analytic? Are they current, retrospective or futuristic? Are they quality or quantity based? Are they policy or practice based? Can they lead to changes in the health care system?

Follow up with Dr. Buttery's [PowerPoint show](#) on Epidemiology of Primary care the review the remaining material on this page ([printable pages](#) of Dr Buttery's slides). The PDF File on advance data from the [NAMCS 2003 survey](#) is now available for your use (Particularly table 13). Possibly for some of you to use as a research topic. Also look at [punch card](#) designed for general practice research in 1963 as part of a clinical practice information system.

Is there a [PCP Crisis](#)

[Are we losing the battle](#) to develop PCPs?

Reports Warn of [Primary Care Shortages](#)

Does Having [More Physicians Lead to Better Health](#) System Performance?

Does [income](#) have anything to do with it?

[New Roles](#) for Primary Care Physicians

[Coaching](#) in Primary Care

What do we know about health care [expenditures](#)?

Is there any recent data about [access](#)?

What about [Prevention in Primary Care Practice](#)

Is anybody doing anything about quality of primary care? See [this presentation](#) from VHQC (also the [handouts](#)) and scan the [VHQC](#) web site for additional information, particularly [help with EHR](#). Also take a look at the 2005 report of the [UK Health System](#), pages 10-13. Compare this to the "[Health Report to the American People](#)", pages 5-10.

What happens when you want a [visit after-hours](#)? An international comparison from the Commonwealth Fund.

Why Case Management? Michael Evans MSW.

What did the [Nurse Case Management discussion say](#) about case management say about the services provided by public health nurses, that exemplified each of the following attributes of case management? Remember that the range of services differs between health departments. The concept you should take with you, is that the underlying framework of case management, provided by PHNs, MSWs, and Health Educators happens in all health departments.

Case management addresses a wide variety of health care issues and needs. As a result, it is often implemented for multiple reasons, including:

1. Case management focuses on the full spectrum of needs presented by clients and their families; it is client-focused. Client and family satisfaction within case- managed systems is generally high.
2. A strong component of case management is an outcome orientation to care. The goal is to move with the client/ family toward optimal care outcomes.
3. Case management facilitates and promotes coordination of client care, minimizing fragmentation.

4. Case management promotes cost-effective care by minimizing fragmentation, maximizing coordination, and facilitating client/family movement through the health care
5. Case management maximizes and coordinates the contributions of all disciplines within the health care team.
6. Case management responds to the needs of insurers and other third-party payers, specifically those related to out-come-based, cost-effective care.
7. The needs of clients, providers, and payers all receive attention within a case management system. Case management represents a merger of clinical and financial interests, systems, and outcomes.
8. Case management can be included in the marketing strategies of hospitals and other institutions to target clients/ families, insurers, and employers.

[Primary Care & Nurse Practitioners](#)

[Primary Care Standards](#)

[Primary Care in the UK is not Monolithic.](#)

[Principles for health care in the UK](#) (At least they have enunciated some!)

The Medical Home ([Video from KFF](#))

Look at page 19 - "Governing by Network"(from EPID 602), "Wired, Joined Up, & Pushed down" and consider the role of case management and the relationship of public health and clinical care,. Is there something to learn?

Look at [Models for Changing Practice](#)

Those students with a military background may find [this case management article](#) fascinating (you will need to use your VCU-EID)

Value of a Medical Home and quick access to care: See Toward Higher-Performance Health Systems: [Adults' Health Care Experiences in Seven Countries, 2007](#) , Commonwealth Fund survey released Nov 1, 2007

Is a Medical Home part of a community of care/team based practice?

- The Patient-Centered Medical Home For Chronic Illness: Is It [Ready For Prime Time?](#)
- [Testing a New Model](#) of Care Delivery
- [Innovations:](#) Medical Home' Or Medical Motel 6?
- [Transitional Care](#) - A role for Nurses?

Either before going further, or after reading [the definitions](#) of primary care and family practice by the American Academy of Family Physicians, log on the to Institute of Medicine and review the summary of the book: "[Primary Care: America's Health in a New Era.](#)"

Primary Care Definition from Rakel - "Principles of Family Medicine"

Primary Care. The specialty of family practice is specifically designed to deliver primary care. Primary care has been defined by both the AAFP and ABFP as a form of medical care delivery which emphasizes first contact care and assumes ongoing responsibility for the patient in both health maintenance and therapy of illness. It is personal care involving a unique interaction and communication between then patient and physician. It is comprehensive in scope and includes the overall coordination of the care of the patient's health problems, be they biological, behavioral or social. The appropriate use of consultants and community resources is an important part of effective primary care scope, and includes the overall coordination of the care of the patient's health

Because many physicians deliver primary care, in different ways and with varying degrees of preparation, the ABFP added a further clarifying statement:

Primary Care is a form of delivery of medical care which encompasses the -following functions:

1. It is "first-contact" care serving as point-of-entry for the patient into the health-care system;
2. It includes continuity by virtue of caring for patients over a period of time in both sickness and in health;
3. It is comprehensive care, drawing from all the traditional major disciplines for its functional content;
4. It serves a coordinating function for all the health-care needs of the patient;
5. It assumes continuing responsibility for individual patient follow-up and community health problems; and
6. It is a highly personalized type of care.

Primary Physician. A primary physician was defined by the "Millis Commission" as one who

... "Should usually be primary in the first contact sense. He will serve as the primary medical resource and counselor to an individual or a family." When a patient needs hospitalization, the service of other medical specialists, or other medical or paramedical assistance, the primary physician will see that the necessary arrangements are made, giving such responsibility to others as is appropriate and retaining his own continuing and comprehensive responsibility.

Few hospitals and few existing specialists consider comprehensive and continuing medical care to be their responsibility and within their range of competence

Additional descriptive data about Family Practice is provided in the following material from the Department of Family Medicine

Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.

Accessible refers to the ease with which a patient can initiate an interaction for any health problem with a clinician (e.g., by phone or at a treatment location) and includes efforts to eliminate barriers such as those posed by geography, administrative hurdles, financing, culture, and language.

Health care services refers to an array of services that are performed by health care professionals or under their direction, for the purpose of promoting, maintaining, or restoring health. The term refers to all settings of care (such as hospitals, nursing homes, clinicians' offices, intermediate care facilities, schools, and homes).

Clinician means an individual who uses a recognized scientific knowledge base and has the authority to direct the delivery of personal health services to patients.

Accountable applies to primary care clinicians and the systems in which they operate. These clinicians and systems are responsible to their patients and communities for addressing a large majority of personal health needs through a sustained partnership with a patient in the context of a family and community and for (1)quality of care, (2)patient satisfaction, (3)efficient use of resources, and (4) ethical behavior.

Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.

Integrated is intended in this report to encompass the provision of comprehensive, coordinated, and continuous services that provide a seamless process of care. Integration combines events and information about events occurring in disparate settings and levels of care and over time, preferably throughout the life span.

Comprehensive. Comprehensive care addresses any health problem at any given stage of a patient's life cycle.

Coordinated. Coordination ensures the provision of a combination of health services and information that meets a patient's needs. It also refers to the connection between, or the rational ordering of those services, including the resources of the community.

Continuous. Continuity is a characteristic that refers to care over time by a single individual or team of health care professionals ("clinician continuity") and to effective and timely communication of health information (events, risks, advice, and patient preferences) ("record continuity").

Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.

Majority of personal health care needs refers to the essential characteristic of primary care clinicians: that they receive all problems that patients bring --unrestricted by problem or organ system and have the appropriate training to diagnose and manage a large majority of those problems and to involve other health care practitioners for further evaluation or treatment when appropriate. Personal health care needs include physical, mental, emotional, and social concerns that involve the functioning of an individual.

Sustained partnership refers to the relationship established between the patient and clinician with the mutual expectation of continuation over time. It is predicated on the development of mutual trust, respect, and responsibility.

Patient means an individual who interacts with a clinician either because of illness or for health promotion and disease prevention.

Context of family and community refers to an understanding of the patient's living conditions, family dynamics, and cultural background. Communities refers to the population served, whether they are patients or not. Community can refer to a geopolitical boundary (a city, county, or state), or to neighbors who share values, experiences, language, religion, culture, or ethnic heritage.

Facts About the AAFP and Family Practice

AAFP Official Definitions of "Family Practice" and "Family Physician"

Family Practice

Family practice is the medical specialty which provides continuing and comprehensive health care for the individual and family. It is the specialty in breadth which integrates the biological, clinical, and

behavioral sciences. The scope of family practice encompasses all ages, both sexes, each organ system, and every disease entity.

The specialty of family practice is the result of the evolved and enhanced expression of general medical practice and is uniquely defined within the family context.

Family Physician

The family physician is a physician who is educated and trained in family practice - a broadly encompassing medical specialty.

Family physicians possess unique attitudes, skills, and knowledge which qualify them to provide continuing and comprehensive medical care, health maintenance and preventive services to each member of the family regardless of sex, age or type of problem, be it biological, behavioral, or social. These specialists, because of their background and] interactions with the family, are best qualified to serve as each patient's advocate in all health-related matters, including the appropriate use of consultants, health services, and community resources.

Family Practice: Content and Responsibility For

The American Academy of Family Physicians maintains full responsibility for determining the philosophy, content and scope of family practice, and for establishing the definition of "family practice" and "family physician." It is recognized that accreditation of family practice residency programs is the responsibility of the Accreditation Council on Graduate Medical Education (ACGME). Certification of family physicians is the responsibility of the American Board of Family Practice (ABFP). Both accreditation of training and certification of individuals should be based on the philosophy, content and scope of family practice as defined by the AAFP.

(Definitions adopted by the American Academy of Family Physicians' Congress of Delegates)
[AAFP Definitions, Explore the site.](#)

Additional research data develop by Dr. Buttery at the Eastern Virginia Medical School, and Maurice Wood at MCV, and presented at NAPCRG (North American Primary Care Research Group) in 1978 shows the similarity between Family Physicians and General Internists while illustrating the much narrower range of problems seen by general pediatricians who limit their practice to people under 18 years of age and Obstetrician-gynecologists who limit their care to the reproductive systems of women.

In relation to the presentation on case management and the data from the Department of Family Medicine why do you think it was necessary for the US Preventive Services Task force to publish the following statement?

U.S. Preventive Services Task Force

December 12, 1995 Bob Griffin,

TALK MORE, TEST LESS, PANEL URGES HEALTH PROVIDERS
Disease Prevention Experts Call for
More Counseling, Better-Targeted Screening

A task force of prominent preventive health specialists today recommended that doctors and nurses offer more frequent patient counseling on personal health and safety habits, significantly change the use of some screening tests, and ensure that several newer immunizations are routinely provided.

The [U.S. Preventive Services Task Force](#), an independent panel first convened in 1984 as an initiative of the U.S. Public Health Service, issued the first revision of its widely used 1989 guide to effective disease prevention and health promotion, based on a careful review of scientific evidence.

Also consider the value of [Evidence Based Guidelines](#)

Primary Care: and its linkages with Public Health & Preventive Medicine

- 1) Definition: The Epidemiology of Primary Care
 - 2) A system of care which provides first contact and continuing comprehensive medical care. (IOM definition)
 - 3) Parameters of medical care
 - Accessibility
 - Acceptability
 - Affordability
 - Availability
 - Achievable
 - Comprehensive with Continuity
 - 4) How does it differ from specialty care?
 - 5) How much do we need?
 - 6) How and who do we train
 - 7) How do we get them where they need to be?
 - 8) How do we keep them down on the farm (or what are the support systems?)
 - 9) How do we measure the effectiveness/efficiency of primary care
-

Also review the activities of the [Virginia Health Care Foundation](#) ([printable format](#)) and determine how this program helps to improve access to primary care, then look at the site for the [Virginia Primary Care Association](#) and determine how program, along with the VHCF (above) also improve access to primary care.
Look at the [map](#) provided by the VPCA.

Recommended readings to supplement the Primary Care Discussion . Students are urged to at least read the summaries of these articles, even if they do not read the entire article.

[How many and what types](#) of physicians are needed to manage the health needs of the US Population. Do you think we have produced either too many, the wrong types, or used the wrong incentives to encourage distribution?

(You can use you VSC EID within the library, so you can get to all these articles on-line instead of having to search the stacks)

Benchmarking the US Physician Workforce. An alternative to needs-based or Demand-Based Planning. JAMA Dec 11, 1996, Vol. 276 No 22 P 1811*Public Health and Primary Care: A Framework for Proposed Linkages. AJPH. Oct 1996, Vol. 86 No 10. P 1365.

An Uncertain Future: Physician Jobs in the Balance. JAMA Jan 1, 1997, Vol. 277 No 1 P 68

Once we have determined how many physicians/providers, of what type, we need, how do we obtain them and does more physicians mean better quality of care?

Retraining Physicians for Primary Care. A Study of Physician Perspectives & Program Development. JAMA May 21, 1997, Vol. 277 No 19 P 1569

Family Physician Workforce Reform. AAFP Recommendations (Medicine & Society.) AFP Jan 1996 Page 65

Problem of Quality of Life Medicine. JAMA July 2, 1997, Vol. 278 No 1 P 47

We hear about health system reform. What are we trying to reform? Access? Payment? Types of Physicians trained? Distribution? Quality? Incentives to promote prevention of disease and optimal Health? Medical Care? Are these different questions interrelated? How?

Also:

New Prevention Guidelines called 'State of the Art'. JAMA Feb. 21, 1996, Vol. 275 No 7 P 505

Health System Reform (Special Communication.) JAMA Aug 14, 1996, Vol. 276 No 6 P 505

Medicine & Public Health - Pursuing a common destiny. JAMA Nov 6, 1996, Vol. 277 No 17 P 1429

Swapping Health Care Systems. Whose Grass is Really Greener?. JAMA Dec 25, 1996, Vol. 276 No 24 P 1996

Health Reform for the 21st Century? It May have to Wait until the 21st Century. JAMA Jan 25, 1997, Vol. 277 No 3 P 193

Managed Care. A product of Market Dynamics. JAMA Feb. 19, 1997, Vol. 277 No 7 P 560

New links:

[EMR](#) for office based physicians

[VCOM](#) Osteopathic Medicine

Partnership for Prevention - [Ranking of clinical procedures.](#)

Medical Case Management - [Do's and don'ts](#)

UK [Role for Primary Care](#)

[Integrated Systems Improve](#) Medical Care

PC Bookmarks - [Updated 2009](#)

Maternal & Child Health, Women's Health Issues

Objectives

Upon completion of this seminar the students should be able to describe

- Maternal Health, Children's and Women's programs administered by state and local health departments.
- The main policy and management issues in Maternal and Child Health programs
- The role of local public health agencies in developing programs for Women.
- The contribution of local health departments to reducing morbidity & mortality among children and pregnant women.
- The value of the MCH programs in improving the health of the community.
- Competencies: 1A(2,7,8), B(1), C(1, 22,6,7,8), D(1,5,6,7,8,9). E(1,4,7,9) F(1-5), 11A(1-7)

Key Words

Pregnancy
Fertility
Chronic Diseases
Women's health studies
Infant Mortality
Family support services
Immunization
Cancers
Preventive Intervention
Health education
Community services (non governmental)

Concept:

The health needs of children, adolescents, and women are unique. Programs designed for these populations should be tailored to these needs.>

References:

Handouts.
Course Essays [9](#), [12](#)
Introduction to Public Health. Schneider, 2nd Edn. Chapter 18

MCH programs were the original focus of public health, and continue to be a major focus in the USA as well as the remainder of the world. To assist you, in starting to learn about the breadth and depth of women's and children's health and the interwoven programs, we provide the following PowerPoint slide shows as well as a set of Hotlinks to useful health sites for women and children. Review the contents of the hot links prior to the class.

1) [Introduction](#) Prepared by Ted Tweel MD (Director - Hanover Health District) ([.pdf](#)) Then look at the [History of MCH](#) from HRSA's MCH Bureau

2) Look at the excellent data set at [Women's Health 2007](#) Read the Introduction and Health Indicators.
Then review [Slides](#) ([printable version](#)) provided by **Deborah Harris MPH, RD, CDE**

Also scan the following pdf files:

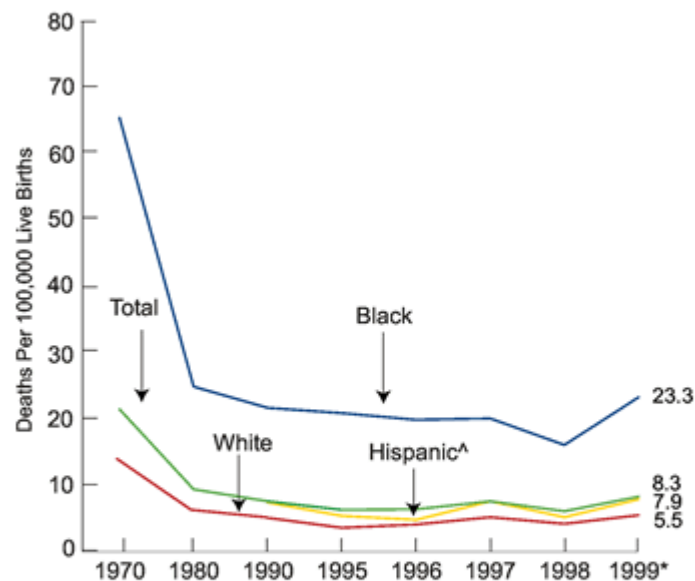
[Collaborating](#) to Improving Women's Health
Virginia Women's [Health Statistics](#)
CDC [Office of](#) Women's Health: An Overview
KFF on [Perspectives](#) on Women and Health Care (2005)
KFF [Web page](#) on Women's Health

Look at these [resources](#) for Women's Health :

[Wake Up Call](#) - Advance Women's Health
[Women's Health Virginia](#)
[Death Rates 1997 by age and race](#)
March of Dimes - Status of [newborn screening](#)
Women's & Children's [Health Policy Center](#) - JHU (Click on Projects)
Society for [Women's Health Research](#)
Maternal & Child Health Bureau of HRSA; [Programs](#)
Maternal & Child Health - [History of MCH](#) Look at the Milestones
ACOG: [Preterm Birth](#): Causes, Consequences, and Prevention

Age-Adjusted Maternal Mortality, by Race and Hispanic Origin, Selected Years 1970-1999

Source (II.1): National Vital Statistics System



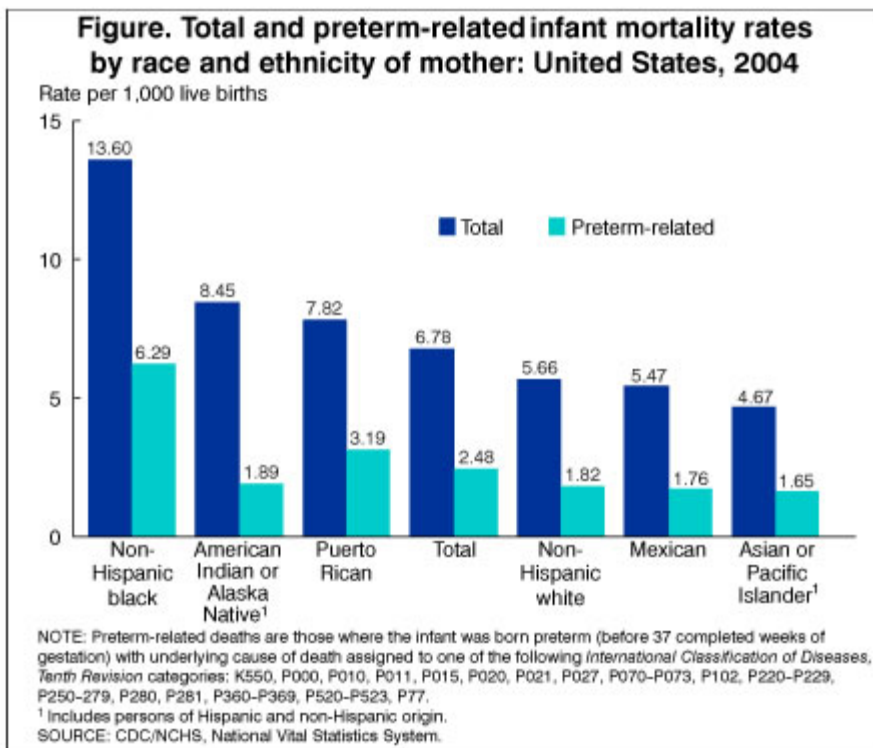
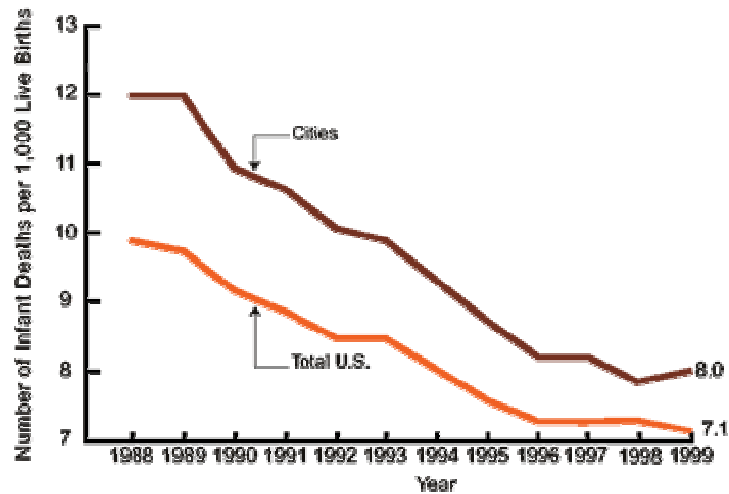
Note: Rates are age adjusted to the 1970 distribution of live births by mother's age in the U.S.

*Starting with 1999 data, changes have been made in the classification and coding of maternal deaths under ICD-10. The increase in the number of maternal deaths between 1998 and 1999 is due to changes associated with ICD-10.

^AData not available prior to 1990; excludes data from States lacking an Hispanic-origin item on their death and birth certificates.

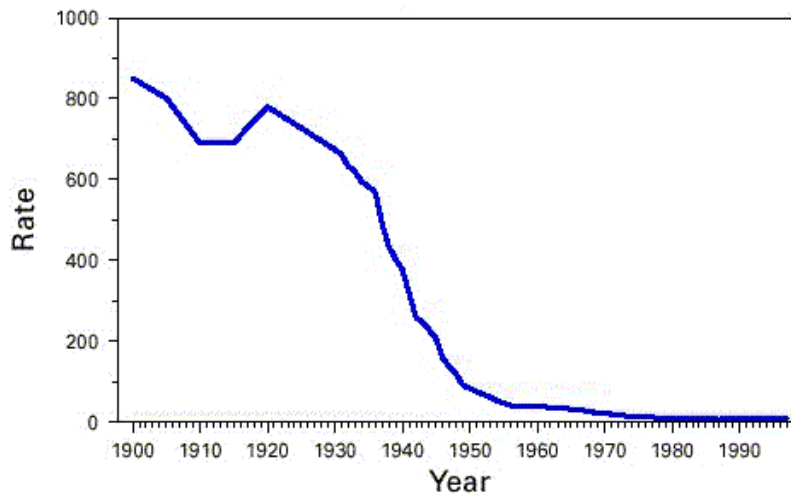
INFANT MORTALITY RATES IN U.S. CITIES WITH POPULATION OVER 100,000: 1988-1999

Source (U2): National Center for Health Statistics



3) [Maternal & Child Health](#). ([Handouts](#)) Presented by **Joan Corder-Mabe RN MPH**.

FIGURE 2. Maternal mortality rate,* by year — United States, 1900–1997



*Per 100,000 live births.

Also **scan** these recent papers (1008) on Premature Birth and Black/White differences.

Editorial [from Lancet](#)

Epidemiology of [Preterm Birth](#)

Black Infant [Mortality](#)

From the KFF: Los Angeles Times Examines [Unintended Pregnancy Among Low-Income Women](#), Jun 26, 2006

Late Breaking (Nov. 2008) Nation Gets A "D" As March of Dimes Releases [Premature Birth Report Card](#)

4) [Children's Health](#) ([Handouts](#)) **Bethany Geldmaker, Ph.D.**, Virginia department of Health

AMA Site: [Adolescent health](#)

Look at: [Child Health USA 2007](#).

Child Health Links:

[KFF - Expanding Coverage for Children -- The Democrats' Power and SCHIP Reauthorization](#),"

Scan the [Kids Count](#) State-Level data-2008

Child Health Care [Quality Toolbox](#)

National Campaign to [Prevent Teen Pregnancy](#)

6) [MCH URLs](#).

Toward a National Health Program Role of Safty Net Programs

Jack O. Lanier Dr. P.H., & Sheryl Garland MHA

Please review information available at the UNC [Minority Health Project](#) and scan the keynote video lectures available as web casts, particularly the one by Yvonne Maddox on [Health Disparities](#), (toward the end of the list), you will need to register but there is no charge for viewing the webcast. This is an excellent starting point for any research on health disparities.

After this lecture you should be able to discuss

- why there is a need for an organized national 'health' program
- who should be covered by such a program
- some of the elements you think are important in its development
- What comprises a community health Safety net
- Why there is a need to focus on underserved populations
- [Competencies](#): 1D (1-10)1F(1-5) III!(all)

Key Words:

Underserved populations, public policy, access to services, geographic barriers, condition coverage, population covered, public private linkages, ambulatory vs. institutional care..

Concept:

Poor health of underserved populations is due to many factors which can be controlled by the affected individuals., but first there needs to be access to care

Health Care [Safety Net & Richmond](#) - ([Handouts](#)) Sheryl Garland MHA, Also read [my comments](#) on the development of the programs. Sheryl refers to the IOM study "[Shared Destiny](#)". I have provided a link to [the book](#) which you can read on-line or purchase from the IOM

Scan "[Holes in Americas' Safety Net](#)" particularly pages 5-8

and [Spreading the Safety Net](#) — Obstacles to the Expansion of Community Health Centers (NEJM-2008)

Dr Lanier's [PowerPoint Show](#), [pdf Handouts](#)., deal with barriers to chaninr our current system.

References

Schneider:Introduction to Public Health, 2nd Edn; Scan Chapters 25 and 30

Minority Health [Web-cast Archive](#) at Kaiser Foundation (scan morning video session)

Kaiser Foundation [Access Web Page](#) (particularly the paper on "uninsured and access to health care, particularly Sicker and Poorer: The Consequences of Being Uninsured - executive summary & briefing charts)

Kaiser Foundation [Health Insurance Coverage](#) (scan [Trends and Indicators in the Changing Health Care Marketplace](#))

Health System Change, the RWJF funded analysis: The Health Care [Cost-Coverage Conundrum](#) (a 6 page pdf) What approach do these authors advocate for improving equity among consumers?

Massachusetts Health Care Reform-[Update\(NEJM\)](#)

PBS - [Are we in a health care crisis?](#) May 2006

Mirror, Mirror on the Wall: A [Video Update](#) on the Quality of American Health Care Through the Patient's Lens, April 2006 From the Commonwealth Fund
Pay attention to the accompanying written summary and implications.

Addl Readings:

SE Differences in [Developing Countries](#).
The [German Health](#) Care System
[What is Happening to the NHS?](#) (from The Lancet)
[Health Access](#) by State (scan)

Late Breaking, Nov 18 2008: [White Paper on Health Care Reform](#) - Sponsor- Senator Baucus

URLs related to this topic - updated [May 2009](#)