

Generally, this class will meet on **Mondays from 3:30 - 5:30 pm**. However, given the first week schedule and Labor Day, the first class will be held on **Monday, September 9th** in the Classroom in the ADAMS OAKTEL at 1201 Massachusetts Avenue.

Please call Melissa's cell phone number in case of emergency or if you need help getting to the ADAMS OAKTEL: 551-795-5442.

SESSION ONE -- Monday September 9th

***NOTE: Class will meet from 3:30 to 5:30 PM in Classroom of the ADAMS OAKTEL, 1201 Mass Ave.**

Introduction to Child Health

- Introductions and overview of course
- **Exploratory Questions:** How do we define "children"? How do we define "health"? How does your personal background/culture affect the answers to these questions?

Powerpoint: [Child Health in the US](#)

Exercise: Why are teen drivers singled out in anti-cell phone and texting laws?

Epidemiology and Research Part I

What are the scientific, social, geographic and political factors affecting child health? Who can improve child health, and how? How do we measure the impact of these factors?

Reading(s) (Recommended):

- Palfrey and Richmond. [The Millennial Morbidity](#)

SESSION TWO -- Monday, September 16th

Introduction to Library Resources at Harvard

NOTE: We will meet from 3:30-5:30 PM in Widener Library

We will discuss:

The American Academy of Pediatrics. [Blue Print for Health](#). AAP, 2018.

Discussion: Using the sections and headings, we will discuss current US initiatives to improve child well-being in this country. Are we targeting the most important factors? Are we doing enough? What should we be doing differently? Why does the US rank lower than most developing nations in most categories of child health?

SESSION THREE -- Monday September 23d

This session will be in the OAKTEL

State of Children's Health in the United States

Epidemiology and Research II

- Please choose one topic (i.e. Obesity, Access to Care, Mortality) from [Fast Stats - Child Health - Centers for Disease Control and Prevention](#) and be ready to discuss with class
- **How to Read a Research Paper:** What is the paper addressing? What methodology is being used? How are statistics used to test a hypothesis? Does the author go beyond the analysis in the conclusions?
- **How to Research and Write a Paper:** Tips and Pitfalls, Quoting, Attributing, Referencing and Bibliographies, Avoiding Plagiarism, Use of the Internet

Time permitting:

CASE STUDY: Bright Futures Infant Case

Bright Futures Middle Child

Bright Futures Adolescent Case

Reading/Viewing (Required):

- Innocenti - 15. [An Unfair Start: Inequality in Children's Education in Rich Countries](#).
- [Health Insurance Coverage Improves Child Well-Being](#)

Reading/Viewing (Recommended):

- [Child Health in Rich Countries - UNICEF](#)
- Palfrey and Richmond. [The Millennial Morbidity](#)
- [Hans Rosling -- GapMinder](#)

Exploratory Questions: How do the factors we discussed last session shape the health of children in your state or country? How do we find quantitative parameters of health and illness in infants, children and adolescents? How do we follow trends

in health status?

SESSION FOUR -- Monday, September 30

Health Conditions: Infectious Diseases & Vaccines with Historical Perspective

Overview of vaccines (how the body builds immunity) History and provision of vaccines (costs, benefits, and risk; US vaccination policy) The role of vaccination in child health (players, universality, parental preferences) Preventive health initiatives (effectiveness, risk, public perceptions, herd immunity) Three vaccines—HPV, Rotavirus, HIV

Exploratory Questions: What are the most important future vaccines that need to be developed and how might you go about doing so? Investigate disparities in provision of vaccine internationally and nationally. Suggested exercise: look up Benj Waterfield, Edward Jenner, Lord Jeffrey Amherst, the saga of Andrew Wakefield and its repercussions, the Broad St cholera epidemic, Dr. John Snow, Albert Sabin

Powerpoint: [Vaccines](#)

Reading(s):

- [*Riedl, S. "Edward Jenner and the history of smallpox and vaccination". Proceedings of the Baylor University Medical Center. 18\(1\): 21-25.](#)
- [*Blume, S. and Geesink, I. "A Brief History of Polio Vaccines". Science. 288\(5471\): 1593-1594. 2000.](#)
- [9 million infants worldwide not vaccinated in 2016: A WHO Report](#)

Discussion: We will use these historical stories to illustrate not only the ingenious development of immunity against population-devastating illnesses but the opposition the pioneers faced, and how this opposition parallels opposition to vaccination today. What are the valid concerns anti-vaccine groups pose? Draw parallels to the HIV epidemic response. Draw parallels to our efforts to battle obesity—the processes of discovery of causes, spread, education, response, success or failure.

Reading(s):

- [Historical Facts about the Dangers and Failures of Vaccines](#)
- ["Immunization Safety Review". Institute of Medicine of the National Academies.](#)

***2 PAGE PAPER ON PUBLIC HEALTH INTERVENTIONS DUE September 30**

When should states pass laws and regulations about personal decisions/ behavior such as requiring parents to vaccinate their children, prohibiting companies from selling large, sugar-sweetened beverages, driving without a seat belt fastened, smoking in public places, etc.?

SESSION FIVE -- Monday, October 7

Health Conditions: Obesity

Childhood obesity is rising as a serious childhood problem with major consequences both for children and for the adults they will become. We will explore the health, economic and social costs of asthma and discuss the wide range of solutions that are being worked on to combat the problem of childhood obesity.

Powerpoint: [Childhood Obesity](#)

Reading(s):

- [Taveras, EM et al. Comparative effectiveness of childhood obesity interventions JAMA Pediatr. 2015, 169:535-42.](#)
- [Woo JA and Taveras EM. Protecting Progress against Childhood Obesity—the National School Lunch Program New England Journal of Medicine 2014; 371:1862-1865. November 13, 2014](#)
- Center for Mississippi Health Policy. Year Four Report. [Assessing the Impact of the Mississippi Healthy Student Act.](#)

Reference document:

*Solving the Problem of Childhood Obesity Within a Generation: [White House Obesity Task Force Report](#)

Exploratory Questions: Why does the first lady want to solve this problem in a generation? How does childhood obesity begin to predict a myriad of future health problems? What are the underlying causes of the childhood obesity epidemic? Is it an epidemic? What are the medical approaches? What other approaches can be taken? Is the First Lady's Let's Move Initiative having an effect on the prevalence of childhood obesity? What is the impact of epigenetics on the long term consequences of the current trends in obesity?

***DECISIONS REGARDING PAPER TOPICS AND SIGN UP FOR PRESENTATION DATES**

Please plan to attend an Office Hours with Sean, Judy or Melissa to go over your ideas.

NO CLASS ON Monday, October 14th (National Holiday)

SESSION SIX -- Monday, October 21st

HOSPITAL VISIT

For our 10/21/2018 hospital visit, please meet me at the **Lamont Library bus stop at 2:30 PM**. We'll be taking the 2:45 PM

bus to get to Harvard Med School and then we'll walk over to Boston Children's.

Feel free to call/text Melissa (551-795-5442) with any questions!

SESSION SEVEN -- Monday, October 28

Health Condition: Asthma, Lead, and other environmentally triggered illnesses

- Sources of health problems (air, water, soil, food, humans)
- Epidemiology, basic science, and ways to study health problems
- Medical and public health approaches to the problems (tradeoffs: between risks and benefits, prevention and treatment, health priorities and capitalism, short and long term outcomes)
- Children as special victims (biological, physical and political reasons)

Reading(s):

- [* Akinbami LJ, Moorman MS et al. Trends in Asthma Prevalence, Health Care Use and Mortality 2001-2010. NCHS Data Brief](#)
- [* Woods ER, Bhaumik U, Sommer SJ et al. Community Asthma Initiative: Evaluation of a Quality Improvement Program for Comprehensive Asthma Care. Pediatrics. 2012;129:465-472.](#)
- [Jackson KD, Howie LD, Akinbami LJ. Trends in allergic conditions among children: United States, 1997-2011. NCHS data brief, no. 121. Hyattsville, MD: National Center for Health Statistics. 2013.](#)

Support Readings:

- Most recent surveillance data: <https://www.cdc.gov/asthma/asthmaadata.htm>
- [*Akinbami, L.J., Moorman, J.E., Garbe, P.L., and Sondik, E.J. "Status of Childhood Asthma in the US, 1980-2007". Pediatrics. 2009. 123: S131-S145.](#)
- [*Nicholas et al. "Addressing the Childhood Asthma Crisis in Harlem: The Harlem Children's Zone Asthma Initiative". American Journal of Public Health. February 2005. 95\(2\):245-249](#)
- [*Akinbami, L.J., Rhodes, J.C., and Lara, M. "Racial and Ethnic Differences in Asthma Diagnosis Among Children Who Wheeze". Pediatrics. May 2005. 115\(5\): 1254-60.](#)

Exploratory Questions: You know from your practice of pediatrics that there are many children with asthma in your city who cannot pay for the medications they have been prescribed, so they often go to the ER. You've recently been elected chapter president of your state AAP. What do you do?

SESSION EIGHT-- Monday, November 4

Health Care Delivery and Reform, Medical Home, & Children with Special Healthcare Needs (CSHCN)

Scope of healthcare. Historical Discussions. Description of a Medical Home and how the need for the concept grew as medicine became increasingly specialized and complex. Originally a pediatric concept (Cal Sia). Has now become a rallying cry for medicine and family medicine. Not as well accepted or understood by the general public. Financing models would incorporate "infrastructure funding" as well as "encounter funding." Why some employers and insurers are embracing the concept. Discussion of successful Medical Home models, especially for children with special health care needs.

Powerpoint: [Health Care Reform](#)

Reading(s)/Viewing(s):

- [Palfrey JS, Sofis L, Ganz M, Lieu J and Davidson E. Evaluation of the Medical Home for Children with Special Health Care Needs: How feasible is the model? Pediatrics 2004;113\(5 Suppl\):1507-16.](#)
- [*Strickland et al Assessing and Ensuring a Comprehensive System of Services for CSHCN](#)
- [*Child Health USA 2014](#) 93-96, 106-107
- [*Key Facts about the ACA](#)
- **Take time to watch "[Sick Around the World](#)"**

Support Readings:

- Prevalence and Characteristics of Children With Special Health Care Needs
Peter C. van Dyck, MD, MPH; Michael D. Kogan, PhD; Merle G. McPherson, MD;
Gloria R. Weissman, MA; Paul W. Newacheck, DrPH
Arch Pediatr Adolesc Med. 2004;158:884-890
- [*Fisher ES, Berwick DM, Davis K. Achieving health care reform--how physicians can help.](#)
- [*"Program to Enhance the Health and Development of Infants and Children \(PEHDIC\)". American Academy of Pediatrics. The National Center of Medical Home Initiatives for Children with Special Needs. Updated 12 August 2009.](#)
- [Palfrey JS, Hall R. Health care reform: the doorway to health care transformation. Pediatrics. 2010;126:374-5.](#)
- For more information on international health care systems check out: <https://international.commonwealthfund.org/>

Exploratory Questions: Pick a US State and explore what that state does on making the Medical Home a reality for children with special health care needs.

See: <http://www.cshcndata.org>

What would you do to increase awareness and understanding of the Medical Home concept?

Activity:

[Group 1: Medicaid](#)

[Group 2: Employer based insurance](#)

[Group 3: Pre-existing conditions](#)

[Group 4: Cutting expenses](#)

SESSION NINE -- Monday , November 11th

Racial Disparities in Health

Film about Vivien Thomas

Exploratory Questions: What are the correlates of race and health? How is infant mortality affected by race? What social determinants account for disparities in health outcomes by race?

Support Reading(s):

- [Berry J, Bloom S, Foley S, Palfrey JS. Health inequity in children and youth with chronic health conditions. Pediatrics. December 2010, VOLUME 126 / ISSUE Supplement 3 pp.S111-S119.](#)
- [Stressors in pregnancy on White and Black babies.](#)
- [Trent M, Dooley DG, DougÃ© J. AAP Section on Adolescent Health, AAP Council on Community Pediatrics, AAP Committee on Adolescence. The Impact of Racism on Child and Adolescent Health. Pediatrics. 2019;144\(2\):e20191765](#)
- It's About Trust: Low-Income Parentsâ€™ Perspectives on How Pediatricians Can Screen for Social Determinants of Health

Activity: Do the implicit bias test at <https://implicit.harvard.edu/implicit/demo/>. Do at least 2 of the examples.

INDIVIDUAL PAPERS DUE 11:59pm on November 4th.

JJ and Maria's presentations

SESSION TEN -- Monday, November 18

HEALTH CONDITION: MENTAL HEALTH

Children and youth have many mental health conditions that require attention by child mental health specialists. The problems include traditional mental health diagnoses such as psychosis, anxiety, depression, bi-polar disease as well as behavioral conditions such as ADHD, eating disorders, drug and alcohol dependence and addiction. The health care system in the United States has only recently concentrated effort on supporting children and youth with mental health disorders. As a result there are large gaps in service for these children and youth.

Reading:

[CDC Report Children's Mental Health](#)

1-2 PARAGRAPH REFLECTION ON THE VIVIEN THOMAS MOVIE DUE 11/25

Student Presentations: Sheccid, Gena, Rahul, Marie, Rosie, Lizzy

SESSION ELEVEN-- Monday, November 25

We will use this session to review the development of specialty care in the United States (the ologies) to discuss your experiences in the hospital visits, your observations and reflections. This can also be a chance to go more into topics that we have discussed in greater detail.

<https://www.cdc.gov/socialdeterminants/>

<https://www.healthypeople.gov/2020/data-search/health-disparities-data>

2 PAGE PAPER ON HEALTH CARE REFORM DUE 11/11

Student Presentations: Steven, Kilee, Chabeli, Esther, Sean, Kaede

SESSION TWELVE-- Monday, December 2nd

Student Group Presentations and Alumni Day

Unifying Concepts and questions for each session:

These questions should direct your reading and thinking and as you research and examine every course topic.

General: In the context of each topic, does "good health" mean different things to you, your family, your country of origin, your religion?

For each **clinical** topic:

1. Define the spectrum from “good” to “poor” health for each illness (*create a “number line” for yourself*). Where should we focus our efforts? Why there?
2. What are the challenges to maintaining good health?
3. What have we established as standard health-encouraging activities or programs? Are they the “right” ones?
4. How are children physically and mentally different than adults? How are they at more or less risk for particular conditions?
5. Define the progression of the particular illness. Which steps are preventable? Where, when and how can we afford to intervene?
6. What are the greatest obstacles to preventing illness and restoring health?
7. What information, data do you need to know?
8. How could you improve the health of a community in the context of that illness?

For each **historical / public health** topic: (Pretend this is your final exam)

1. What were the revolutionary changes in approach or philosophy that transformed the ways people thought about child health?

For example, when considering children’s rights:

- When did children become anyone’s priority and how much of one are they now?
 - Are all children equal “boy vs girl, black vs white, poor vs rich, immigrant vs long-established?
 - At what point should one prioritize public over individual health, prevention over treatment, regulation over recommendation?
 - How is health care reform doing? How would you change it?
2. What are the distinct roles of parents, villages, states and federal administrations?
 3. How have basic scientists, educators, writers, public health professionals, social activists, legislators, political leaders contributed to child health?
 4. How would you go about making the next conceptual quantum leap in child health?
 5. How have people created agendas for change in this country, in your state? (Read about Virchow, Jacobi, Haggerty, Richmond, Berwick)

Weekly Readings:

There will be weekly reading assignments to be completed prior to each class. The nature of these readings will vary from week to week—some will be scholarly journal articles, some will ask you to peruse medical and health-related websites, some will be educational materials published by advocacy groups.

You should use the “Unifying Concepts and Questions for Each Class” as a tool to guide you through the readings every week. Although the readings will not *explicitly* answer these questions, we ask that you spend time thinking hard about each source, “make a leap” and infer answers to the questions based on the knowledge you acquire.

Based on feedback from last year’s students, we reduced the reading to 1-2 main articles for each class. Although we encourage you to read the articles provided as additional reading, the expectation is that you will read the 1-2 articles and come prepared to discuss them in class.

Weekly Current Events in Child Health in America

Each week a group of assigned students (3-4) will be asked to identify a single article which is pertinent to child health issues in America. It is up to you as a group to work out which article to review and bring to class in your assigned week. A great resource to obtain current events articles is the American Academy of Pediatrics Smartbriefs, which are sent out daily. You simply have to sign up for them at: <https://www.smartbrief.com/aap/index.jsp>

This weekly assignment will provide students with powerful knowledge on the current issues involving child health in our country. The expectation is that your group will lead a discussion on the article at the beginning of your assigned class.

Response Papers

You will be asked to write three short (2 page) response papers: one on immunizations, one on your reactions to a movie about racial disparities, and one on health care reform. These will be due the week after we discuss the topic.

Individual Paper (10 pages):

This paper will be on a topic of your choice, and will be due earlier in the semester. The nature, grading (rubric), and format of the paper are provided as a separate document.

Group Presentation:

You will be asked to research a topic in small groups and present your findings to the class. The topic of your group presentation will not be the same as the topic you choose for your individual papers. All groups will present (approximately 10 minutes, plus discussion) during the last class meeting. The nature, format and grading (rubric) of the presentations are provided as a separate document.

Looking at the causes of childhood mortality, neonatal mortality presents itself as the “low hanging fruit”. If babies who are dying at birth could be saved, 40% of the child mortality problem would be solved. Through meetings at Bellagio and subsequent publications in Lancet, a series of interventions has been promoted to address Millennial Development Goals 4 and

5. These interventions focus on prenatal care, the birth process and the immediate post natal period as well as on-going preventive maintenance for young children and teenage women.

Exploratory Questions: What is the Countdown Project? What countries are reaching the Millennial Goals? What countries are not? If you were the Minister of Health of one of the Countdown countries that was not making its goal, how would you address the problem? Who would you call on for help? How would you garner support from others in your country? How would you get resources from the International community? What strengths in the local communities would you call on? Would you involve faith-based organizations?