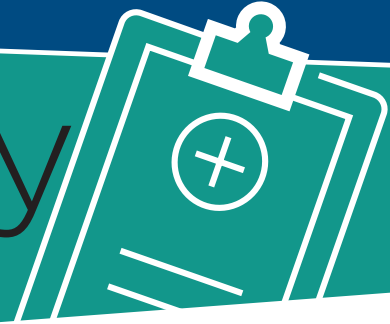


Epidemiology

(MS, MPH / PhD, DrPH)



WHAT IS EPIDEMIOLOGY?

- Study of the distribution and determinants of health-related states or events, including disease and the application of this study to the control of diseases and other health problems.
- Various methods can be used to carry out epidemiological investigations: surveillance and descriptive studies can be used to study distribution; analytical studies are used to study determinants.

SAMPLE TOPICS OF EPIDEMIOLOGIC STUDIES:

- **Environmental Exposures:** Lead and heavy metals; air pollutants and other asthma triggers
- **Infectious Diseases:** foodborne illness, influenza and pneumonia
- **Injuries:** increased homicides; national surge in domestic violence
- **Non-Infectious Diseases:** localized or widespread rise in particular type of cancer; increase in a major birth defect
- **Natural disasters:** Hurricanes Katrina & Rita (2005); Haiti earthquake (2010)
- **Terrorism:** World Trade Center (2001); Anthrax release (2001)

POPULAR EPIDEMIOLOGIST SPECIALTIES:

- Infectious and Chronic Diseases
- Maternal and Child Health
- Public Health Preparedness & Emergency Response
- Environmental Health
- Substance Abuse & Mental Health

GRADUATE PUBLIC HEALTH PROGRAMS WITH EPIDEMIOLOGY FOCUS

- Johns Hopkins Bloomberg School of Public Health
- Harvard T.H. Chan School of Public Health
- U North Carolina Gillings School of Global Public Health
- U Michigan School of Public Health
- Columbia U Mailman School of Public Health
- U Washington School of Public Health
- Emory U Rollins School of Public Health

ADMISSION REQUIREMENTS: FOR JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH

- Application
 - Statement of objectives and research goals (2 page limit)
 - Resume/CV, Transcripts
 - Three letters of recommendation (at least one academic, adviser preferred)
- Standardized Tests
 - GRE/MCAT or TOEFL/IELTS (scores less than 11/7.5 will not be considered)
 - Average scores in the 70th percentile or higher and an average GPA of 3.3
- Courses
 - Math through calculus
 - Biology
 - One additional science
- Work Experience
 - One year minimum of full-time post baccalaureate work is required for the PhD and ScD, only.

EPIDEMIOLOGY (MS, MPH / PHD, DRPH)

WHAT CAN YOU DO WITH YOUR DEGREE?

- Master's (MPH or MS)
 - Epidemiologist: studying diseases in a given population or group
 - Clinical Researcher: using research to study the efficacy of treatment
 - Data Analyst: using data to draw conclusions for the good of public health
- Doctorate (PhD or DrPH)
 - Director of Clinical Research: overseeing clinical research in a given institution
 - Professor of Epidemiology: teaching in an academic setting, usually at a college or university
 - Epidemic Intelligence Service Officer: investigation possible and actual disease outbreaks

IMPORTANT LINKS

- American Journal of Epidemiology: *academic.oup.com/aje*
- Public Health Online: Epidemiology: *publichealthonline.org/epidemiology*
- Public Health: Epidemiology & Research: *publichealth.org/careers/epidemiology*
- Epimonitor: *epimonitor.net/About*
- World Health Organization: *who.int/topics/epidemiology/en*
- Centers for Disease Control and Prevention: *cdc.gov*
- Post-grad fellowships: *cdc.gov/fellowships/full-time/bachelors*
- Principles of Epidemiology in Public Health Practice (pdf): *cdc.gov/ophss/csels/dsepd/ss1978/ss1978.pdf*
- National Institutes of Health: *nih.gov*
- Explore Health Careers: Epidemiology: *explorehealthcareers.org/career/public-health/epidemiology*