Epidemiologists

SOC: 19-1041 • Career Profile Report

■ Key Facts

$83,980	12,300	+16.0%
Median Salary	Employment	Growth Rate

■ Requirements & Salary Range

Education: Master's degree

■ Automation Risk Assessment

Low Risk - 8.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■■ Work-Life Balance

9.8/10 - Excellent work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	6.2/10	**Investigative**	9.4/10
Artistic	5.6/10	**Social**	6.4/10
Enterprising	4.8/10	**Conventional**	6.4/10

■ Top Skills Required

Communication skills, Critical-thinking skills, Detail oriented, Leadership skills, Math and statistical skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Epidemiologists study patterns, causes, and effects of **diseases and health conditions in populations**. They collect and analyze data, investigate outbreaks, and develop strategies to prevent and control disease. Their work is critical in public health, research, and policy-making.

This career is well suited for individuals who enjoy research, data analysis, and improving community health.

What Do Epidemiologists Do?

These professionals design studies, analyze health data, and provide insights to reduce disease risk and improve public health outcomes.

Common responsibilities include:

- Collecting and analyzing health and disease data
- Investigating outbreaks and identifying causes
- Designing and conducting epidemiologic studies
- Evaluating public health programs and interventions
- Communicating findings to health authorities, policymakers, and the public
- Preparing reports, scientific papers, and presentations
- Collaborating with healthcare providers, researchers, and government agencies

Key Areas of Epidemiology

Epidemiologists may specialize in specific diseases, populations, or methods:

- Infectious Disease Epidemiology: Studying the spread and control of infectious diseases
- Chronic Disease Epidemiology: Researching long-term health conditions and risk factors
- Environmental and Occupational Epidemiology: Assessing health risks related to workplace or environmental exposures
- Field Investigation and Outbreak Response: Conducting on-site studies and rapid response to health emergencies
- Biostatistics and Data Analysis: Applying statistical methods to interpret health data

Skills and Abilities Needed

Epidemiologists combine analytical, research, and communication skills.

Core Professional Skills

Personal Qualities That Matter

Education and Career Pathway

This role typically requires formal education and research experience:

- Bachelor’s Degree (minimum): Biology, public health, or related field
- Master’s Degree (common): Epidemiology, public health, or biostatistics
- Doctoral Degree (optional): For research, teaching, or advanced positions
- Internships or Field Experience: Gaining practical experience in health studies, surveys, or public health agencies
- Continuous Learning: Staying updated on disease trends, research methods, and public health policies

Where Do Epidemiologists Work?

They are employed in organizations focused on public health, research, and disease prevention:

- Public Health Departments and Agencies
- Hospitals and Healthcare Organizations
- Universities and Research Institutions
- Government and International Health Organizations

- Nonprofit and Advocacy Groups

Work environments include offices, laboratories, field sites, and healthcare facilities.

Is This Career Difficult?

This career requires strong analytical, research, and communication skills. Epidemiologists must handle complex health data, investigate disease patterns, and provide evidence-based recommendations.

Who Should Consider This Career?

This career may be a strong fit if you:

- Enjoy research, data analysis, and public health
- Are detail-oriented and analytical
- Can communicate findings effectively
- Are interested in disease prevention and population health
- Want a career contributing to health policy and community well-being

How to Prepare Early

- Take courses in biology, public health, statistics, and research methods
- Participate in research projects, internships, or volunteer work in public health
- Develop skills in data analysis, epidemiologic methods, and scientific writing
- Stay informed on health trends, disease outbreaks, and public health guidelines
- Explore graduate programs in epidemiology or related fields

Epidemiologists study and analyze diseases, guiding public health strategies, research, and interventions to improve population health and prevent outbreaks.
