

PUBLIC HEALTH CERTIFICATES

The following certificates are available through the Colorado School of Public Health at the **CU Anschutz Medical Campus in Aurora, Colorado**:

Applied Biostatistics

This certificate, offered at the University of Colorado Anschutz Medical Campus, provides graduate training in applied biostatistics for health care professionals and others interested in expanding their analytic knowledge and skills. This 15-credit certificate will provide you with skills in basic data management, biostatistics, and data analysis with applications in a wide range of clinical and public health areas. Upon completion, you'll be ready to meet the increasing demand for biostatistical expertise in the workforce.

Curriculum

Code	Title	Hours
Required Courses (6 credits)		
BIOS 6601	Applied Biostatistics I	3
BIOS 6602	Applied Biostatistics II	3
Computing Electives (3 credits from the following courses):		
BIOS 6640	R for Data Science	3
BIOS 6642	Introduction to Python Programming	3
BIOS 6680	Data Management Using SAS	3
BIOS 6681	Structured Query Language Using SAS PROC SQL	1
Biostatistics Electives (6 credits from the following courses):		
BIOS 6623	Advanced Data Analysis	3
BIOS 6641	Causal Inference	3
BIOS 6629	Applied Survival and Longitudinal Data Analysis	3
BIOS 6685	Introduction to Public Health Informatics	3
EPID 6630	Epidemiology	3
Total Hours		18

Global Public Health

This certificate program, offered at the University of Colorado Anschutz Medical Campus, will help you address the health challenges that have arisen with increasing globalization. As the world becomes more interconnected, governments and non-governmental organizations have changed the ways they tackle health issues like HIV/AIDS, communicable diseases, malnutrition, diabetes, and access to medical care. In this program, you'll learn how to address global health disparities on community and systems levels.

Curriculum

Code	Title	Hours
Required Course (10 credits)		
CBHS 6619	Public Health in the Global Community	3
EHOH 6623	Geographic Perspective on Global Health	1
BIOS 6601	Applied Biostatistics I	3
EPID 6630	Epidemiology	3
Electives (5 credits from the following courses):		
CBHS 6629	Health and Human Rights	3
CBHS 6632	Public Health in the Caribbean and Latin America	3

CBHS 6633	Intensive Study of Public Health Services in Cuba	3
EHOH 6621	GIS for Public Health Research/Practice	3
EHOH 6633	International Travel and Health	1
EPID 6624	Public Health Surveillance	2
EPID 6635	Infectious Disease Epidemiology	2
EPID 6640	Investigation of Disease Outbreaks	2
EPID 6641	Epidemiology of Foodborne and Diarrheal Diseases	2
EPID 6643	Epidemiology and Prevention of TB/HIV/STDs	2
HSMP 6602	Health Equity	3
HSMP 6615	Current Global Health Policy Issues	2
Total Hours		15

Health Analytics & Data Science

This certificate, offered at the University of Colorado Anschutz Medical Campus, provides graduate training in analytic methods and data science for healthcare professionals and researchers. In this program, you'll learn about analytic methods for large and complex data in areas like 'omics, imaging, electronic health records, and mobile health. When you leave this program, you'll be ready to answer complex clinical questions by using data to display and communicate healthcare trends.

Curriculum

Code	Title	Hours
Required Analytics and Computing Courses (5-6 credits)		
BIOS 6602	Applied Biostatistics II	3
or BIOS 6611	Biostatistical Methods I	
BIOS 6640	R for Data Science	3
or BIOS 6642	Introduction to Python Programming	
Analytics Electives (3 credits from the following courses):		
BIOS 6612	Biostatistical Methods II	3
BIOS 6623	Advanced Data Analysis	3
BIOS 6641	Causal Inference	3
BIOS 6645	Predictive Analytics	3
BSBT 6111	Introduction to Biomedical Data Practices	2
CSCI 5930	Machine Learning	3
CSCI 5931	Deep Learning	3
CSCI 5580	Data Science	3
CSCI 7952	Big Data Science	3
MATH 6388	Statistical and Machine Learning	3
Computing Electives (3 credits from the following courses):		
BIOS 6680	Data Management Using SAS	3
BIOS 6640	R for Data Science	3
BIOS 6642	Introduction to Python Programming	3
BIOS 6644	Practical Data Wrangling	2
CPBS 7630	Computational Methods for Data Challenges in Biomed	3
CSCI 5559	Database Systems	3
CSCI 5951	Big Data Systems	3
Optional Specialty Electives (3-4 credits in the following areas):		
4		
Genomics		
Health Informatics		
Imaging Analysis		
Health Services Research		

Mobile Health	
Total Hours	22

Latino Health

This certificate, offered at the University of Colorado Anschutz Medical Campus, is designed to develop the talent pipeline of individuals who can make a difference in the Latino community. In this program, you'll gain a theoretical framework for addressing health disparities in the Latino community, guidance from highly successful mentors, and the opportunity to be involved in relevant experiential learning projects.

Curriculum

Code	Title	Hours
Required Courses (9 credits)		
CBHS 6645	Latino Health I	2
CBHS 6655	Latino Health II	2
CBHS 6665	Latino Health Mentored Project	2
PUBH 6600	Foundations in Public Health	2
Electives (7 credits from the following courses):		
CBHS 6610	Social and Behavioral Factors and Health	3
CBHS 6612	Methods in Research and Evaluation	3
CBHS 6613	Program Planning and Implementation	3
CBHS 6614	Childhood Obesity	1
CBHS 6615	Health Literacy & Public Health	2
CBHS 6616	Intimate Partner Violence: Epidemiology	1
CBHS 6617	Nutrition and Public Health	1
CBHS 6619	Public Health in the Global Community	3
CBHS 6620	Survey Research	3
CBHS 6624	Community Health Assessment	3
CBHS 6628	Tech-based health Promotion	3
CBHS 6629	Health and Human Rights	3
CBHS 6631	Introduction to Sexual and Reproductive Health	1
CBHS 6633	Intensive Study of Public Health Services in Cuba	3
CBHS 6632	Public Health in the Caribbean and Latin America	3
CBHS 6633	Intensive Study of Public Health Services in Cuba	3
CBHS 6636	Early Childhood Hlth, ACEs, Toxic Stress, Hlth Equity	1
CBHS 6638	Advanced Qualitative Research Methods	3
EHOH 6614	Occupational and Environmental Health	3
EHOH 6618	Environmental Health Policy and Practice	3
EHOH 6619	Environmental Exposures and Health Effects	3
EHOH 6621	GIS for Public Health Research/Practice	3
EHOH 6622	Intro to Public Health in Disasters	3
EHOH 6623	Geographic Perspective on Global Health	1
EHOH 6625	Global Response to Disasters and Climate Crises	3
EHOH 6638	Communication Skills for Public Health Impact	3
EPID 6628	Global Health and Disasters	2
EPID 6630	Epidemiology	3
HSMP 6601	Introduction to HSMP	3
HSMP 6602	Health Equity	3
HSMP 6605	Health Policy	3
HSMP 6615	Current Global Health Policy Issues	2
PBHC 5200	Healthcare Systems, Policy and Management	3

PBHC 5300	Environmental Public Health and Policy	3
PBHC 5500	Social and Community Health	3
PBHC 5700	Epidemiology for Public Health	3
CHBH 5090	Behavior Change Theories	3
CHBH 5500	Environmental Health	3
CHBH 6200	UNC Epidemiology	3
CHBH 6350	Policy, Advocacy, Leadership & Management in Community Health	3
Total Hours		15

Public Health Preparedness & Disaster Response

You can complete this program entirely online, take your classes at the University of Colorado Anschutz Medical Campus, or do a mix of both. In this program, you'll learn how to promote the health of communities threatened by natural hazards, incidents of mass violence, civil conflict, infectious disease outbreaks, and other emergent public health threats. This interdisciplinary certificate focuses on training the leaders of tomorrow to help domestic and international communities prepare for, respond to, and recover from disasters. In addition, you'll get hands-on experience through table-top and field simulation exercises.

Curriculum

Code	Title	Hours
Required Courses (12 credits)		
EHOH 6622	Intro to Public Health in Disasters	3
EHOH 6625	Global Response to Disasters and Climate Crises	3
EHOH 6626	Disasters and Climate Crises: Practical Applications	3
EHOH 6642	Climate and Disaster Mental Health	3
or EHOH 6645	Research Methods: Climate, Disaster, Humanitarian	
Electives (3 credits from the following courses):		
CBHS 6619	Public Health in the Global Community	3
CBHS 6624	Community Health Assessment	3
CBHS 6629	Health and Human Rights	3
EHOH 6620	Risk Analysis & Decision Making	3
EHOH 6621	GIS for Public Health Research/Practice	3
EHOH 6623	Geographic Perspective on Global Health	1
EHOH 6624	Infectious Diseases, Environmental Contexts	3
EHOH 6633	International Travel and Health	1
EHOH 6635	Climate Change and Health	3
EHOH 6638	Communication Skills for Public Health Impact	3
EPID 6624	Public Health Surveillance	2
EPID 6628	Global Health and Disasters	2
EPID 6634	Applied Global Health Epidemiology	2
EPID 6635	Infectious Disease Epidemiology	2
EPID 6640	Investigation of Disease Outbreaks	2
HSMP 6608	Ethical and Legal Issues in Public Health	2
HSMP 6615	Current Global Health Policy Issues	2
HSMP 6618	Comparative Health Systems	2
ANTP 5320	Culture of Disaster	3
ANTP 5380	Food, Hunger and Culture	3
FSHN 5000	Food Systems, Nutrition and Food Security	2

IEOO 6790	Advanced International Development	3
Total Hours		15

Population Mental Health & Wellbeing

This certificate, offered at the University of Colorado Anschutz Medical Campus, will help you to understand the challenges of preventing and treating mental health and substance use conditions to promote mental well-being at a population level. You'll be introduced to innovative, population-minded approaches to behavioral health issues and be trained in epidemiology, health policy, social and behavioral health, and more. This certificate is ideal for public health practitioners interested in building their expertise in behavioral health issues and for members of the behavioral health workforce looking for a population-based perspective.

Curriculum

Code	Title	Hours
Required Courses 12 credits)		
PMHW 6601	Mental Health	3
PMHW 6620	Mental Health Systems and Policy	3
CBHS 6610	Social and Behavioral Factors and Health	3
EPID 6630	Epidemiology	3
Electives (3 credits from the following courses):		
Content Focused Electives		
CBHS 6616	Intimate Partner Violence: Epidemiology	1
CBHS 6621	Introduction to Maternal and Child Health	3
CBHS 6629	Health and Human Rights	3
CBHS 6634	Adolescent Health	1
EHOH 6622	Intro to Public Health in Disasters	3
EPID 6637	Injury and Violence Epidemiology and Prevention	2
ANTP 5450	Global Mental Health - Theory and Method	4
HDFS 6120	Adolescent Development	3
PSCY 6000	Health Psychology	3
Methods Focused Electives		
BIOS 6602	Applied Biostatistics II	3
BIOS 6648	Design and Conduct of Clinical Research	3
CBHS 6612	Methods in Research and Evaluation	3
CBHS 6613	Program Planning and Implementation	3
HSMP 6602	Health Equity	3
HDFS 6080	Program Design and Implementation	3
HDFS 6090	Prevention Program Evaluation	3
CHBH 6100	Program Planning and Evaluation	3
CHBH 6150	Methods in Public Health Research and Evaluation	3
Total Hours		18

Public Health Sciences

Public health is a profession that connects numerous disciplines in pursuit of healthier and safer communities. Whatever field you're currently in, consider enriching your professional background through this certificate, which is designed for students who don't yet have formal education in public health. You can enroll in this certificate at any of our three university locations—CU Anschutz Medical Campus (<https://coloradosph.cuanschutz.edu/education/locations/cu-anschutz-medical-campus/>), Colorado State University (<https://coloradosph.cuanschutz.edu/education/locations/csu/>), or the University

of Northern Colorado (<https://coloradosph.cuanschutz.edu/education/locations/unc/>). And if you fall in love with public health while you're studying with us, you can follow up on your certificate with an application to one of our Master of Public Health programs (<https://coloradosph.cuanschutz.edu/education/degrees-and-programs/master-of-public-health/>).

Curriculum

Code	Title	Hours
Required Courses (8 credits)		
BIOS 6601	Applied Biostatistics I	3
EPID 6630	Epidemiology	3
PUBH 6600	Foundations in Public Health	2
Electives (7 credits)		7
Total Hours		15

The following certificates are available through the Colorado School of Public Health at **Colorado State University in Fort Collins, Colorado**:

Public Health Sciences

Public health is a profession that connects numerous disciplines in pursuit of healthier and safer communities. Whatever field you're currently in, consider enriching your professional background through this certificate, which is designed for students who don't yet have formal education in public health. You can enroll in this certificate at any of our three university locations—CU Anschutz Medical Campus (<https://coloradosph.cuanschutz.edu/education/locations/cu-anschutz-medical-campus/>), Colorado State University (<https://coloradosph.cuanschutz.edu/education/locations/csu/>), or the University of Northern Colorado (<https://coloradosph.cuanschutz.edu/education/locations/unc/>). And if you fall in love with public health while you're studying with us, you can follow up on your certificate with an application to one of our Master of Public Health programs (<https://coloradosph.cuanschutz.edu/education/degrees-and-programs/master-of-public-health/>).

Curriculum

Code	Title	Hours
Required Courses (8 credits)		
PBHC 5600	Quantitative Methods in Public Health	3
PBHC 5700	Epidemiology for Public Health	3
PBHC 5160	Public Health Foundations	2
Electives (7 credits)		7
Total Hours		15

The following certificates are available through the Colorado School of Public Health at the **University of Northern Colorado in Greeley, Colorado**:

Public Health Sciences

Public health is a profession that connects numerous disciplines in pursuit of healthier and safer communities. Whatever field you're currently in, consider enriching your professional background through this certificate, which is designed for students who don't yet have formal education in public health. You can enroll in this certificate at any of our three university locations - CU Anschutz Medical Campus, Colorado State University, or the University of Northern Colorado. And if you fall in love with public health while you're studying with us, you can follow up on

your certificate with an application to one of our Master of Public Health programs.

Curriculum

Code	Title	Hours
Required Courses (8 credits)		
CHBH 6120	Statistical Applications in Public Health	3
CHBH 6200	UNC Epidemiology	3
PUBH 6600	Foundations in Public Health	2
Electives (7 credits)		7
Total Hours		15

Rural Public Health

This certificate, offered primarily at the University of Northern Colorado with many electives at Colorado State University, is designed to help meet the need for talented public health professionals in rural communities. In this program, you'll learn about health disparities that affect rural populations, gain an understanding of effective community engagement strategies, and learn how to access and address community health needs.

Curriculum

Code	Title	Hours
PUBH 6600	Foundations in Public Health	2
CHBH 5050	Health Communications and the Media	3
CHBH 6200	UNC Epidemiology	3
CHBH 5680	Rural Community Health Issues	3
Electives (4 credits from the following courses)		4
CBHS 6624	Community Health Assessment	3
CHBH 6120	Statistical Applications in Public Health	3
CHBH 5250	Contemporary Issues in School Health	3
CHBH 5090	Behavior Change Theories	3
CHBH 5300	Strategies for Community Health Promotion	3
CHBH 5350	Effective Community Health Engagement	3
CHBH 5500	Environmental Health	3
CHBH 6350	Policy, Advocacy, Leadership & Management in Community Health	3
AGRI 5460	Principles of Cooperative Extension	3
AGRI 5470	Delivery of Co-operative Extension Programs	4
FSHN 6200	Community Nutrition Plan and Evaluation	3
FTEC 5740	Current Issues in Food Safety	2
HDFS 6100	Risk and Resilience	3
PBHC 5400	One Health in Public Health	3
PBHC 6921	Public Health Seminar - EPI	2
Total Hours		15

The following certificates are available through the Colorado School of Public Health via **Online** instruction:

American Indian & Alaska Native Health

In this online certificate program you'll learn how to implement, evaluate and research interventions to improve the health and well-being of American Indian and Alaska Native communities. While this population experiences greater poverty rates, discrimination in access to care, and rates of chronic illness compared to other Americans, this certificate will

afford students the opportunity to learn about the resilience and strength of American Indians and Alaska Natives. In this program, you will learn how to harness the lessons learned from American Indian and Alaska Native peoples to positively shape public health interventions, programs, and policy for the benefit of all.

Code	Title	Hours
Required Courses:		
CBHS 6647	Foundations of American Indian Alaska Native Health (Required Courses:)	3
CBHS 6644	Social Determinants of AIAN Health	3
CBHS 6648	Ethical Considerations in AIAN Health	1
CBHS 6646	Community Participatory Research & Review with American Indians/Alaska Natives	2

Elective Courses: Choose a minimum of 6 credits from the following approved online elective credits:

BIOS 6601	Applied Biostatistics I	3
BIOS 6685	Introduction to Public Health Informatics	3
CBHS 6610	Social and Behavioral Factors and Health	3
CBHS 6612	Methods in Research and Evaluation	3
CBHS 6614	Childhood Obesity	1
CBHS 6616	Intimate Partner Violence: Epidemiology	1
CBHS 6617	Nutrition and Public Health	1
CBHS 6619	Public Health in the Global Community	3
CBHS 6620	Survey Research	3
CBHS 6627	Maternal Nutrition	1
CBHS 6628	Tech-based health Promotion	3
CBHS 6631	Introduction to Sexual and Reproductive Health	1
CBHS 6632	Public Health in the Caribbean and Latin America	3
CBHS 6634	Adolescent Health	1
EPID 6640	Investigation of Disease Outbreaks	2
EPID 6630	Epidemiology	3
HSMP 6601	Introduction to HSMP	3
HSMP 6634	Management, Budgeting and Public Health Administration	3
PUBH 6600	Foundations in Public Health	2
CHBH 5250	Contemporary Issues in School Health	3

Total Hours 15

Maternal & Child Health

In this online certificate program, you'll learn about evidence-based approaches to improve the health, safety, and well-being of women, children, and families. This certificate provides the options that you need to customize your learning with both high-level views of maternal and child health (MCH) and deep dives into specific topics like MCH nutrition issues or MCH epidemiologic methods.

Curriculum

Code	Title	Hours
Required Courses (5 credits)		
PUBH 6600	Foundations in Public Health	2
CBHS 6621	Introduction to Maternal and Child Health	3
MCH Electives (10 credits from the following courses):		
BIOS 6601	Applied Biostatistics I	3
CBHS 6612	Methods in Research and Evaluation	3

CBHS 6613	Program Planning and Implementation	3
CBHS 6614	Childhood Obesity	1
CBHS 6616	Intimate Partner Violence: Epidemiology	1
CBHS 6617	Nutrition and Public Health	1
CBHS 6618	CURRENT RESEARCH AM INDIAN ALASKA NAT CHILD HEALTH DEV	1
CBHS 6619	Public Health in the Global Community	3
CBHS 6625	Current Regional Issues in Maternal & Child Health	1
CBHS 6627	Maternal Nutrition	1
CBHS 6628	Tech-based health Promotion	3
CBHS 6629	Health and Human Rights	3
CBHS 6631	Introduction to Sexual and Reproductive Health	1
CBHS 6632	Public Health in the Caribbean and Latin America	3
CBHS 6633	Intensive Study of Public Health Services in Cuba	3
CBHS 6634	Adolescent Health	1
CBHS 6635	Child Nutrition	1
CBHS 6636	Early Childhood Hlth, ACEs, Toxic Stress, Hlth Equity	1
CBHS 6641	Developmental Screening, Strategies and Referral	1
CBHS 6643	Women's Health: A Public Health Perspective	2
EPID 6630	Epidemiology	3
EPID 6637	Injury and Violence Epidemiology and Prevention	2
EPID 6641	Epidemiology of Foodborne and Diarrheal Diseases	2
EPID 6642	Genetics in Public Health	2
EPID 6644	Maternal Child Health Epidemiology	3
HSMP 6614	MCH Program Management & Policy Analysis	3
HDFS 6100	Risk and Resilience	3
HDFS 6120	Adolescent Development	3
PSCY 5150	Women's Health	3
CHBH 5250	Contemporary Issues in School Health	3
CHBH 5750	Public Health Issues in Reproductive Health	3
CHBH 6100	Program Planning and Evaluation	3
CHBH 6150	Methods in Public Health Research and Evaluation	3
CLSC 6663	Intervention for Individuals with Developmental Disabilities	3
CLSC 6668	Screening/Assessment for Children/Youth with Autism/Neurodevelopmental Disabilities	3
Total Hours		15

policies, programs, and practices that integrate protection from work-related safety and health hazards with the promotion of injury and illness prevention efforts to advance worker well-being.

Curriculum

Code	Title	Hours
Required Courses (15 credits)		
EHOH 6628	Health Protection/Promotion in the Workplace.	3
EHOH 6634	Spec Professions Protecting/Promoting Worker Health	1
EHOH 6639	Occupational Health Psychology	3
EHOH 6614	Occupational and Environmental Health	3
EHOH 6629	Introduction to Occupational Safety and Ergonomics	2
EHOH 6638	Communication Skills for Public Health Impact	3
Total Hours		15

Total Worker Health[®]

This online program is designed for public health graduate students and current working professionals who are seeking career advancement. In this program, you'll learn how to develop and manage Total Worker Health (TWH) initiatives—workplace safety, wellness, and health promotion programs. You'll learn how to assess organizational culture, plan and evaluate health and safety programs, and become a better leader. In addition, you'll take classes taught by expert faculty from the Center for Health, Work & Environment (<https://coloradosph.cuanschutz.edu/research-and-practice/centers-programs/chwe/home/>)—one of six Centers of Excellence for TWH. With this certificate, you'll become part of a community of business leaders and academics committed to workplace health and safety.

According to the National Institute for Occupational Safety and Health (NIOSH) (<https://www.cdc.gov/niosh/twh/default.html>), TWH includes