

# One Health Intern Program

## PUBLIC HEALTH OPPORTUNITY

The One Health Intern Program is a collaborative effort of these Columbus Public Health program areas:

### Human Health

- Epidemiology
- Infectious Disease Investigation
- Strategic Nursing Team
- Outbreak Response
- Emergency Preparedness
- Planning and Quality Improvement

### Environmental Health

- Healthy Homes
- Food Protection
- Water and Land Protection
- Tobacco 21/Smoke Free

### Animal Health

- Vector and Rat Control
- Rabies and Dangerous Animals

Interns will learn about worldwide zoonotic, infectious and environmental diseases in a multi-disciplinary **One Health** setting, interact with real life public health activities and events, and network with public health and allied health professionals.

## QUALIFICATIONS

**Undergraduate or graduate students** in public health, allied health, environmental health, health care and/or veterinary medicine.

## ACTIVITIES & LOCATIONS

### Remote: Variable up to 480 hours

- Intern will review, and update when necessary, current information and research on up to 200 diseases in an existing database.
- Upon completion of the review, the intern will be required to give a PowerPoint presentation on one or more diseases selected at the beginning of the internship. The presentation will be given remotely to a public health and health care audience.

### In-Person (at Columbus Public Health) and Remote: Variable up to 480 hours

- Intern will complete shadowing and training with all Columbus Public Health programs listed above.
- Intern will coordinate the date and time of activities with program managers to allow the greatest flexibility in scheduling.
- Intern will review, and update when necessary, current information and research on one or more diseases selected from an existing database at the beginning of the internship.
- Upon completion of the activities, the intern will be required to give a PowerPoint presentation on the selected disease(s). The presentation will be given in person to a public health and health care audience.

**Projects completed through an internship may satisfy requirements for an Applied Practice, Integrated Learning, Applied Learning Experience, etc.**

## PROGRAM AVAILABILITY

- **Unpaid internships** - Continuous
- **Paid internships** - Subject to available funding

## APPLY TODAY

Visit [columbus.gov/onehealthintern](http://columbus.gov/onehealthintern) to learn more and submit your application.



**CONTINUE READING TO LEARN MORE ABOUT INTERNSHIP ACTIVITIES (PAGES 2-3) AND DISEASES FOR REVIEW (PAGES 4-6).**

## PROGRAM DESCRIPTIONS & INTERN ACTIVITIES

**Epidemiology** – Collects, analyzes and interprets data for community health assessments and program planning and evaluation, conducts surveillance, and prepares for and responds to public health threats.

- Observe collection, analysis and interpretation of community health data for program planning.

**Infectious Disease Investigation** – Investigates reported cases of communicable disease, monitors disease in the community, and prevents the spread of disease.

- Shadow/participate in investigations of foodborne illness complaints and individually reportable foodborne diseases such as Salmonella and Shiga-Toxin producing E. coli (including conducting hypothesis generating questionnaires).
- Participate in interdisciplinary site visits to outbreak affected locations.

**Strategic Nursing Team** – Provides vaccination opportunities throughout the community, assists with emergency community outreach, and provides trainings for Stop the Bleed and Narcan (naloxone) administration.

- Shadow/provide clinical services, including lead testing, school-based vaccine administration and health fairs.
- Obtain/provide professional development through continuing education and community training.

**Outbreak Response** – Investigates and responds to outbreaks to prevent illness and protect the community.

- Facilitate early and rapid detection of outbreaks.
- Coordinate timely and comprehensive investigation of outbreaks and implementation of public health interventions to prevent further illness and protect the community.
- Conduct proactive health education and community outreach to prevent future outbreaks.

**Emergency Preparedness** – Strengthens Columbus' ability to prepare for and respond to emergencies by working with other agencies, developing and practicing emergency plans, monitoring disease, and training responders.

- Learn about Incident Response Structure and Coordination.
- Review Emergency Response Plans.
- Review/assist Points of Dispensing (POD).
- Learn about program-specific topics: BioWatch and public health response.
- Assist at events/exercises occurring at time of internship.
- Shadow/conduct site visits/assessments at chemical-holding facilities, laboratories or partner agencies.

**Food Protection** – Licenses and inspects food service operations and retail food businesses, and offers workshops for food workers.

- Shadow licensing inspections to ensure facilities safely prepare and serve food.
- Research foodborne illnesses by collecting information, identifying contributing factors, and mitigating potential risks.
- Attend food handler presentations.

**Water and Land Protection** – Licenses and inspects public swimming pools, spas, spray parks, private water wells, household and semi-public (small commercial) sewage systems, and solid waste facilities to comply with Ohio regulations. Also offers pool and spa safety training course.

- Shadow inspections of swimming pools, spas, spray parks, private water wells, sewage systems, solid waste facilities and tattoo/body art businesses.
- Attend/review pool and spa safety training course.

**Tobacco 21/Smoke Free** – Licenses, educates and inspects tobacco retailers to comply with Columbus City Code and Columbus City Health Code regulations, provides complaint investigation and enforcement under Ohio's Smoke-Free Workplace law, and collaborates with community partners to promote and support tobacco use prevention.

- Shadow/conduct tobacco buys.
- Shadow/conduct complaint investigations.

## PROGRAM DESCRIPTIONS & INTERN ACTIVITIES, *CONTINUED*

**Vector and Rat Control** – Monitors and controls mosquitoes and rodents to prevent diseases, inspects private swimming pools to prevent mosquito breeding, and consults on insect control.

- Study for/obtain a Commercial Pesticide Applicator's license.
- Shadow inspections of/inspect private swimming pools to prevent mosquito breeding and consult on insect control.
- Learn about/conduct mosquito trapping and identification, and conduct West Nile Virus testing.
- Learn about/conduct post-pesticide spray trapping to determine efficacy of treatments.
- Study how pesticides are utilized to control vectors and conduct bottle assays to determine "knock down" rate of vectors.
- Shadow/conduct mosquito larviciding treatments.
- Shadow/conduct inspections of properties with rodent issues.
- Learn about baiting properties with rodenticides.

**Healthy Homes** – Provides phone consultations on household hazards and assistance to families of lead-poisoned children.

- Conduct phone consultations with individual households on health risks or safety hazards contributing to adverse health outcomes and quality of life issues.
- Attend a lead screening event for children at a Columbus Public Health WIC office or Head Start.
- Shadow a lead investigation for a child with an actionable blood lead level.
- Shadow a lead outreach event.

**Rabies and Dangerous Animals** – Responds to animal bite and 311 Service Center complaints, issues farm animal permits, and provides information on animals and public health.

- Learn about rabies quarantines.
- Shadow farm animal inspections.
- Investigate animal complaints from the public and shadow enforcement activities.

**Planning and Quality Improvement** – Coordinates community health improvement and strategic planning for Columbus Public Health, measures customer satisfaction, guides quality improvement initiatives, and monitors performance and compliance with departmental, state and national public health standards.

- Develop a customer satisfaction survey or simple evaluation.
- Develop measures that define success and use QI to make improvements.

## DISEASE LIST

1. Actinomycosis, Actinostreptotrichosis, Mandibular Cancer, Ray Fungus Disease
2. Adiaspiromycosis, Adiaspirosis, Haplomycosis, Haplospangiosis
3. Aeromoniasis
4. Alaskapox
5. Amebiasis
6. Anaplasmosis
7. Anthrax, Malignant Pustule, Malignant Carbuncle, Charbon Hematic Anthrax, Bacterial Anthrax, Splenic Fever, Woolsorters' Disease
8. Argentine Hemorrhagic Fever, Junin Hemorrhagic Fever, Stubble Disease, O'Higgins Disease, Northwestern Buenos Aires Hemorrhagic Virosis, Endemic-Epidemic Hemorrhagic Virosis
9. Asian Ixodo-Rickettsiosis, North Asian Tick Fever, Siberian Tick Typhus
10. Aspergillosis, Pneumonormycosis, Bronchomycosis
11. Babesiosis
12. Balkan Hemorrhagic Fever, Epidemic Hemorrhagic Fever, Hantaan Virus Disease, Hemorrhagic Nephrosonephritis, Korean Hemorrhagic Fever, Russian Hemorrhagic Fever, Epidemic Nephropathy, Nephropathia Epidemica, Songo Fever
13. Baylisascaris Infection
14. Blastomycosis, North American Blastomycosis, Chicago Disease, Gilchrist's Disease
15. Blue Tongue
16. Botulism, Allantiasis, Lamziekte, Bovine Botulism, Limberneck
17. Boutonneuse Fever, Marseilles Fever, Mediterranean Spotted Fever, Mediterranean Tick Fever, African Tick Typhus, Kenya Tick Typhus, India Tick Typhus
18. Bovine Papular Stomatitis, Granular Stomatitis, Proliferating Stomatitis
19. Bovine Spongiform Encephalopathy, Mad Cow Disease
20. Brazilian Hemorrhagic Fever
21. Brucellosis, Melitococcosis, Undulant Fever, Malta Fever, Mediterranean Fever, Contagious Abortion, Infectious Abortion, Bang's Disease
22. Buffalopox
23. California Encephalitis, La Crosse Encephalitis
24. Campylobacteriosis, Vibrionic Enteritis
25. Candidiasis, Moniliasis, Candidosis, Thrush, Candidomycosis
26. Cat Scratch Disease, Cat-Scratch Fever, Benign Inoculation Lymphoreticulosis, Cat-Scratch Syndrome
27. Ceratomyxosis
28. Chancroid
29. Chikungunya Virus Disease, Chikungunya Fever, Chikungunya Hemorrhagic Fever
30. Chlamydia Trachomatis Infections
31. Cholera
32. Chronic Wasting Disease Of Deer
33. Clostridial Food Poisoning, Clostridial Gastroenteritis, Clostridial Toxicosis
34. Clostridial Wound Infection, Gas Gangrene, Clostridial Myonecrosis, Histotoxic Infection, Anaerobic Cellulitis, Malignant Edema
35. Coccidioidomycosis, Posada's Disease, San Joaquin Valley Fever, Desert Fever
36. Colibacillosis, Colibacteriosis, Colitoxemia, Enteropathogenic Diarrhea
37. Colorado Tick Fever, Mountain Fever
38. Contagious Ecthyma, Orf Virus Disease, Contagious Pustular Dermatitis, Contagious Pustular Stomatitis
39. Contagious Equine Metritis
40. Corynebacteriosis
41. Cowpox, Natural Cowpox
42. Cremian-Congo Hemorrhagic Fever, Central Asian Hemorrhagic Fever, Congo Fever
43. Creutzfeldt-Jakob Disease
44. Cryptococcosis, Torulosis, European Blastomycosis, Busse-Buschke's Disease
45. Cryptosporidiosis
46. Cyclosporiasis
47. Dengue Fever
48. Dermatophilosis, Streptothrichosis, Mycotic Dermatitis
49. Dermatophytosis, Tinea, Dermatormycosis, Ringworm
50. Diphtheria
51. Diseases In Man Caused By Non-O1 Vibrio Cholerae
52. E Coli
53. Eastern Equine Encephalitis, Eastern Equine Encephalomyelitis, Eastern Encephalitis
54. Ebola Disease, Ebola Hemorrhagic Fever, African Hemorrhagic Fever
55. Ehrlichiosis
56. Encephalomyocarditis, Columbia-SK Disease, Meningoencephalomyelitis, MM Virus Infection, Three-Day Fever
57. Enterocolitic Yersiniosis
58. Enterocolitis, Pseudomembranous Enterocolitis, Antibiotic-Associated Diarrhea, Hemorrhagic Necrotizing Enterocolitis
59. Epidemic Polyarthrits, Ross River Fever, Epidemic Polyarthrits And Exanthema
60. Equine Herpes Virus
61. Equine Infectious Anemia
62. Equine Piroplasmosis
63. Flea-Borne Typhus, Murine Typhus, Endemic Typhus, Urban Typhus

**DISEASE LIST, CONTINUED**

64. Food Poisoning Caused By *Vibrio Parahaemolyticus*
65. Foot-And-Mouth Disease, Aphthosis, Hoof-And-Mouth Disease, Aphthous Fever, Epizootic Aphthae, Contagious Aphthae
66. Fowl Typhoid
67. Giardiasis
68. Glanders, Farcy, Cutaneous Glanders, Equine Nasal Phthisis, Maliamus
69. Gonorrhea
70. Group C Bunyaviruses
71. *Haemophilus Influenzae* (Invasive Disease)
72. Hantavirus Adult Respiratory Distress Syndrome, Hantavirus Cardiopulmonary Syndrome
73. Hemolytic Uremic Syndrome
74. Hepatitis A
75. Hepatitis B
76. Hepatitis C
77. Hepatitis E
78. Herpes Simplex Type 1, Herpesvirus Hominis, Human Herpesvirus Type 2
79. Herpesvirus Simiae, B Virus Infection, Simian Herpesvirus B Infection
80. High Path Avian Influenza
81. Histoplasmosis, Reticuloendothelial Cytomycosis, Cavern Disease, Darling's Disease
82. Hog Cholera
83. Human Immunodeficiency Virus (HIV) Infection And Acquired Immunodeficiency Syndrome (AIDS)
84. Ilheus Fever
85. Infection Caused By *Capnocytophaga Canimorsus* And *Capnocytophaga Cynodegmi*, Infection Caused By DF-2 And DF-2-Like Bacteria
86. Infectious Hematopoietic Necrosis
87. Infectious Laryngotracheitis
88. Infectious Pancreatic Necrosis
89. Infectious Salmon Anemia
90. Influenza, Grippe, Pleural Effusion, Pharyngitis, Acute Upper Respiratory Infection
91. Japanese Encephalitis, Japanese Encephalitis Type B
92. Kyasanur Forest Disease
93. Lassa Fever
94. Legionnaire's Disease
95. Leprosy, Hansen's Disease, Hanseniasis
96. Leptospirosis, Weil's Disease, Swineherd's Disease, Rice-Field Fever, Cane-Cutter's Fever, Swamp Fever, Mud Fever, Stuttgart Disease, Canicola Fever
97. Listeriosis, Leukocytosis, Listerial Infection, Listeriasis, Listerellosis, Circling Disease
98. Louping Ill, Infectious Ovine Encephalomyelitis
99. Lyme Disease, Lyme Borreliosis, Lyme Arthritis, Erythema Migrans With Polyarthritits, Erythema Chronicum Migrans
100. Lymphocytic Choriomeningitis, Armstrong's Disease
101. Machupo Hemorrhagic Fever, Bolivian Hemorrhagic Fever, Black Typhus
102. Malaria
103. Marburg Virus Disease, African Hemorrhagic Fever, Green Monkey Disease
104. Mayaro Fever, Uruma Fever
105. Measles, Morbilli, Rubeola, Hard Measles, Red Measles
106. Melioidosis, Whitmore's Disease, Rodent Glanders
107. Meningitis, Aseptic (Viral)
108. Meningitis, Bacterial
109. Meningococcal Disease
110. MERS
111. Molluscum Contagiosum
112. Monkeypox, Mpox
113. Mumps
114. Murray Valley Encephalitis, Australian X Disease, Australian Encephalitis
115. Mycetoma, Maduromycosis, Madura Foot, Maduromycotic Mycetoma, Eumycotic Mycetoma, Actinomycetoma
116. Mycobacteriosis, Nontuberculous Mycobacteriosis, Nontuberculous Mycobacterial Infection
117. *Mycoplasma Gallisepticum* (Turkeys)
118. Necrobacillosis, Schmorl's Disease, Calf Diphtheria, Foot Rot
119. Newcastle Conjunctivitis, Pneumoencephalitis, Pseudoplague Of Fowl, Pseudo-Fowl Pest, Paramyxovirus 1
120. Nocardiosis
121. Norovirus Gastroenteritis
122. Omsk Hemorrhagic Fever
123. Oropouche Virus Disease, Oropouche Fever
124. Orungo Fever
125. Pasteurellosis, Shipping Fever, Bovine Respiratory Disease Complex, Fibrinous Pneumonia, Pasteurella Pneumonia, Hemorrhagic Septicemia, Fowl Cholera, Snuffles
126. Pertussis
127. Plague, Black Death, Pestilential Fever, Pest
128. Poliomyelitis
129. Powassan Encephalitis
130. Proliferative Kidney Disease
131. Protothecosis, Algal Infections
132. Pseudocowpox, Milker's Nodules, Pseudovaccinia, Paravaccinia
133. Pseudorabies
134. Pseudotuberculous Yersiniosis
135. Psoroptic Cattle Scabies



**DISEASE LIST, CONTINUED**

136. Psoroptic Sheep Scabies
137. Q Fever, Pneumorettsiosis, Balkan Influenza, Coxiellosis, Abattoir Fever, Australian Q Fever, Hiberno-Vernal Bronchopneumonia, Nine-Mile Fever, Quadrilateral Fever, Infection Due To Coxiella Burnetti
138. Queensland Tick Typhus
139. Rabies
140. Rat Bite Fever, Haverhill Fever, Epidemic Arthritic Erythema, Streptobacillary Fever
141. Rat Bite Fever, Sodoku, Spirillary Fever
142. Rhinosporidiosis
143. Rhodococcosis
144. Rickettsialpox, Vesicular Rickettsiosis, Kew Garden Fever, Gamasio-Rickettsiosis Varicelliformis
145. Rift Valley Fever, Enzootic Hepatitis
146. Rocio Encephalitis
147. Rocky Mountain Spotted Fever, Spotted Fever, Petechial Fever, Macular Fever, Tick-Borne Typhus, New World Spotted Fever, North American Tick Typhus, Sao Paulo Fever, Choix Fever, Pinta Fever
148. Rosenbach's Erysipeloid, Erythema Migrans, Erysipelotrichosis, Rose Disease
149. Rotaviral Gastroenteritis, Infantile Gastroenteritis, Acute Gastroenteritis Of Children, Neonatal Calf Diarrhea, Nebraska Calf Diarrhea, Suckling Mouse Diarrhea
150. Rubella (Congenital)
151. Rubella (Not Congenital)
152. Russian And Central European Spring-Summer Encephalitis, Tick-Borne Groups B Virus Encephalitis, Far East Spring-Summer Encephalitis, Biphasic Meningoencephalitis, Biphasic Milk Fever
153. Salmonellosis, Nonthyphoid Salmonellosis
154. SARS-CoV-2
155. Scrapie, Lumbar Prurigo, Enzootic Ovine Paraplegia, Rida
156. Scrub Typhus, Tsutsugamushi Disease, Mite-Borne Typhus Fever, Tropical Typhus
157. Sealpox
158. Seoul Virus
159. Severe Acute Respiratory Syndrome (SARS)
160. Shigellosis, Bacillary Dysentery
161. Sindbis Fever, Karelian Fever, Ockelbo Disease
162. Smallpox
163. Spongiform Encephalopathy Of Cats
164. Sporotrichosis
165. St. Louis Encephalitis, Type C Lethargic Encephalitis
166. Staphylococcal Food Poisoning, Staphylococcal Alimentary Toxicosis, Staphylococcal Gastroenteritis
167. Streptococcus, Streptococcal Infection, Streptococcal Sore Throat, Scarletina
168. Swine Vesicular Disease
169. Syphilis
170. Tanapox
171. Tetanus, Trismus, Lockjaw
172. Tick-Borne Relapsing Fever, Endemic Relapsing Fever, Spirochetosis, Spirochetal Fever, Recurrent Typhus, Borreliosis
173. Toxic Shock Syndrome
174. Transmissible Mink Encephalopathy
175. Trichinellosis
176. Tuberculosis (TB)
177. Tularemia, Francis' Disease, Deer-Fly Fever, Rabbit Fever, Ohara's Disease
178. Typhoid Fever
179. Typhus Fever
180. Vaccinia Virus Infection, Vaccinia, Poxvirus Officinalis
181. Varicella
182. Venezuelan Equine Encephalitis, Venezuelan Equine Encephalomyelitis, Venezuelan Encephalitis
183. Venezuelan Hemorrhagic Fever
184. Vesicular Exanthema
185. Vesicular Stomatitis, Sore Mouth Of Cattle And Horses, Vesicular Stomatitis Virus Disease, Vesicular Stomatitis Fever, Indiana Fever
186. Vibriosis, Vibrionic Abortion, Epizootic Infertility, Bovine Genital Vibriosis, Epizootic Ovine Abortion
187. Viral Hemorrhagic Fever (VHF)
188. Viral Hemorrhagic Septicemia
189. Viral Hepatitis Of Man And Nonhuman Primates, Viral Hepatitis A, Epidemic Hepatitis, Epidemic Jaundice, Infectious Hepatitis, Viral Hepatitis B: Serum Hepatitis, Australia Antigen Hepatitis, Viral Hepatitis C: Parentally Transmitted Non-A Non-B Hepatitis
190. Wesselbron Disease, Wesselbron Fever
191. West Nile Fever
192. Western Equine Encephalitis, Western Equine Encephalomyelitis, Western Encephalitis
193. Whirling Disease (Myxobolus Cerebralis)
194. Yellow Fever, Black Vomit
195. Yersiniosis
196. Zika Virus Disease
197. Zoonotic Chlamydiosis, Psittacosis, Parrot Fever, Ornithosis
198. Zoonotic Tuberculosis
199. Zoonotic Typhus Caused By Rickettsia Prowazekii, R. Prowazekii Wild Typhus, Louse-Borne Typhus, Classic Typhus Fever, Typhus Exanthematicus
200. Zygomycosis, Mucormycosis, Entomophthoromycosis