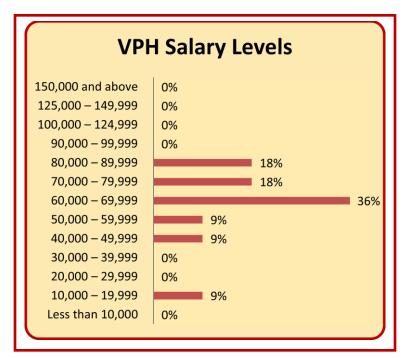
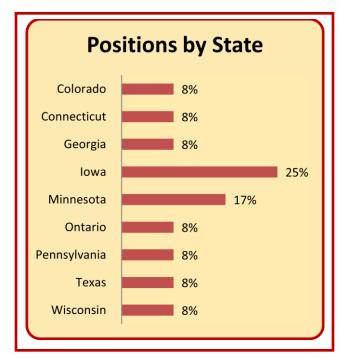
MASTER OF PUBLIC HEALTH - VETERINARY PUBLIC HEALTH



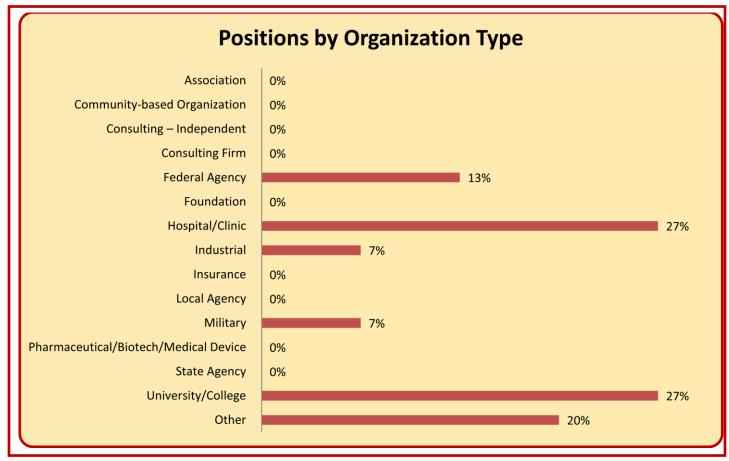


The above charts pertain to recent graduates between 2008 – 2011 (Career Survey Data)

JOB OUTLOOK

- Veterinary Public Health (VPH) was defined by the World Health Organization (WHO) consultation on "future trends in veterinary public health" held in Teramo, Italy in 1999 as "the sum of all contributions to the physical, mental and social well-being of humans through an understanding and application of veterinary science".
 Ultimately, Veterinary Public Health concerns all areas of Public Health that can be protected or improved by Veterinary Medicine.
- Under this broad definition Veterinary Public Health could include almost all aspects of veterinary work from treating pets (as this helps people's "mental & social well-being") to farm animal veterinary work (as this helps secure food production, essential to public health).
- Conventionally Veterinary Public Health as a topic covers the following areas:
 - o Food Production & Safety
 - Zoonosis Control
 - o Environmental Contamination
 - The Role of Animals in Society
- **Food Production & Safety:** It is desirable to consider food production as a chain, with animals reared on the farm (pre-harvest) then going for primary processing (harvest), secondary processing & distribution followed by final preparation (all post-harvest). This "Farm to Fork" concept can be easily described by considering a beef animal on a farm going to slaughter at the abattoir, then the hamburger production plant, then being distributed to a supermarket. The hamburger is then sold, taken home, stored, cooked & eaten. Veterinary Public Health concerns all aspects of food production chain from controlling epidemic diseases that may impact on agriculture, to ensuring slaughter is conducted safely & humanely, to informing the public on safe ways to store & cook hamburgers.
- **Zoonosis Control:** A zoonosis may be defined as any disease and/or infection which is naturally transmissible between animals & man. They are of major public concern. Headlines on issues like Avian Influenza, BSE (mad cow disease) & Salmonella of eggs have dominated the newspaper headlines for the last thirty years. Veterinary Public Health concerns the surveillance & control of zoonoses at many different levels be it via disease control programmes at farm level or wild animals or in the abattoir.
- **Environmental Contamination:** Environmental pollutants that arise through the keeping and use of animals may include pollution of the air, land or water. It can arise through animal waste products as well as chemicals that may be used during production (e.g. insecticides, antibiotics, etc...). In addition, practicing vets will also

- produce potential environmental contaminants in the form of used needles, syringes, animal tissue & other clinical waste. All of these materials have to be dealt with in a safe and controlled way.
- The Role of Animals in Society: This aspect of Veterinary Public Heath deals with a number of ethical issues. Welfare of animals is an ever present issue regardless of the setting, whether it concerns pet animals, production animals or wild animals. Where the line that defines acceptable & unacceptable welfare conditions lies is different for different individuals from different countries & cultures, however, it is common for minimum welfare standards to be defined in legislation. Other issues may concern the use of animals in science, not just for experimentation, but the use of transgenic animals (an animals who has had its genome deliberately altered by genetic engineering techniques as opposed to selective breeding) & xenotransplantation (the transplantation of organs or tissues from one species to another) or the emergence of resistance to antimicrobial drugs due to their use in animals.
- Other Roles/Practices: Risk Communication; Public Health Leadership/Policy; Disaster Preparedness; Occupational Health; Teaching and Research; and Epidemiology.
- In addition, Public Health Veterinarians address complex problems that relate to the health of animals and people; operate as field epidemiologists investigating new and emerging diseases; serve as leaders for zoonoses prevention and control programs such as rabies, foodborne illnesses and arboviruses; prepare and respond to bioterrorism and other public health emergencies; work to ensure the health of humans and animals by promoting safe natural and working environments; and develop public policy at local, state, national and international levels.
- Public Health Vets work mostly in public settings including industry, government, non-profit and private organizations such as:
 - Private Industry pharmaceutical and vaccine companies, animal feed, food processors, medical device companies.
 - O Government Agencies Departments of Agriculture, Departments of Natural Resources, Departments of Public Health, Center for Epidemiology and Animal Health, Center of Disease Control.
 - o <u>International Organizations</u> Food and Agriculture Organization of the United Nations, World Health Organization, World Animal Health Organization.
 - o <u>Uniformed Services</u> Army Veterinary Corps, Air Force Health Officer, Public Health Corps.
 - o <u>International Public Health Agencies</u> Veterinarians without Boarders, Heifer Project International, Pan American Health Organization.



The above charts pertain to recent graduates between 2008 – 2011 (Career Survey Data)

JOB TITLES

<u> </u>		
Assistant/Associate Professor	Diet Design & Formulation	Scientist Biostatistician
Program Director	Export Public Health Veterinarian	EIS Officer - CDC
Private Practitioner	Public Health Veterinarian	Pathology Resident
Research Coordinator	Staff Veterinarian	Study Coordinator
Veterinary Epidemiologist	Veterinary Public Health Director	Veterinary Medical Officer

EMPLOYERS

American Veterinary Medical Assoc. Centers for Disease Control & Prevention (CDC) Children's Hospital Boston Ctr. For Animal Health & Food Safety Dept. of Health & Human Services Dept. of Natural Resources Minnesota Board of Animal Health Medical College of Wisconsin **HealthPartners** National Institutes of Health National Student Leadership Conference **Novartis Pharmaceuticals** The Center for Integrative Medicine State of New Hampshire U.S. Army University of Pennsylvania Health System Proctor & Gamble U.S. Dept. of Agriculture Lawrence Livermore National Laboratory World Health Organization University of Minnesota Veterinarians without Borders Army Veterinary Corps. Lincoln Park Zoo

FIELD EXPERIENCE SITES

Minnesota

Board of Animal Health Humane Society Veterinary Medical Association Michael Foods Minnesota Department of Agriculture Minnesota Department of Education Minnesota Department of Health Minnesota Department of Public Resources National Center for Food Protection and Defense PROSAR

University of Minnesota - Center for Animal Health and Food Safety University of Minnesota - Veterinary Population Medicine Department Volunteers for Intercultural and Definitive Adventures Wildlife Rehabilitation Center of Minnesota

Nation-wide

Bronson Methodist Hospital

Centers for Disease Control and Prevention Centers for Epidemiology and Animal Health Colorado State University Fort Benning Vet Corps **Humane Society of the United States International Service Learning** Iowa Department of Public Health **Larimer County** Lincoln Park Zoo Los Angeles County Veterinary Public Health Michigan Department of Community Health Mountain Gorilla Veterinary Project New Hampshire Department of Agriculture New Mexico Department of Agriculture New Mexico Department of Health New York Animal Import Center- USDA/APHIS New York State Department of Agriculture and Markets Pan American Health Organization Southeast Poultry Research Laboratory U.S. Army U.S. Department of Agriculture

International

American Fondouk Hospital Centers for Disease Control and Prevention – Kenya Food and Agriculture Organization – Vietnam World Health Organization

Wake Forest University Primate Research Center

PROFESSIONAL ASSOCIATIONS

General

- American Public Health Association (APHA) http://www.apha.org
- Minnesota Public Health Association (MPHA) http://www.mpha.net
- Association of Schools of Public Health (ASPH) http://www.asph.org
- American Society of Tropical Medicine and Hygiene (ASTMH) http://www.astmh.org
- Association of Public Health Laboratories (APHL) http://www.aphl.org
- Association of State and Territorial Health Officials (ASTHO) http://www.astho.org
- Carter Center http://www.cartercenter.org/index.html
- National Association of Local Boards of Health (NALBOH) http://www.nalboh.org/
- Pan American Health Organization (PAHO) http://new.paho.org/
- Public Health Foundation (PHF) http://www.phf.org
- World Health Organization (WHO) http://www.who.int/en/
- Global Health Council http://www.globalhealth.org
- Healthcare Professional Associations Directory http://www.pohly.com/assoc2.html