

## *Curriculum Vitae*

**LCDR Troy L. Ritter, REHS, MPH, DAAS**  
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### **Education, Professional Credentials, & Assimilation**

#### **Education**

University of Alaska, Fairbanks Interdisciplinary Studies Program	Doctor of Philosophy Environmental Public Health	Expected 2012
University of Massachusetts	Master of Public Health Environmental Health	May 2006
Eastern Kentucky University	Bachelor of Science Environmental Health	Sept 1999

#### **Professional Credentials**

Registered Environmental Health Specialist (REHS)	Feb 2000
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#### **Assimilation**

Applied for assimilation	July 2009
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### **Career Progression and Mobility**

		<b>Rank(s) Held</b>
<b>2011</b>	<b>Applied Sciences Manager, <u>O-6 Billet Level</u><sup>1</sup> Alaska Native Tribal Health Consortium, Anchorage, AK</b>	<b>O-4</b>
<b>2006</b>	<b>Senior Environmental Health Consultant, <u>O-5 Billet Level</u> Alaska Native Tribal Health Consortium, Anchorage, AK</b>	<b>O-4</b>
<b>2003</b>	<b>Staff Environmental Health Specialist, <u>O-4 Billet Level</u> Alaska Native Tribal Health Consortium, Anchorage, AK</b>	<b>O-2, O-3</b>
<b>2001</b>	<b>Chief Environmental Health Officer (acting), <u>O-4 Billet Level</u> Yukon Kuskokwim Health Corporation, Bethel, AK</b>	<b>O-2</b>
<b>1999</b>	<b>Field Environmental Health Officer, <u>O-2 Billet Level</u> Yukon Kuskokwim Health Corporation, Bethel, AK</b>	<b>O-2</b>

<sup>1</sup> Billet changed from O-5 to O-6 as a result of the PHS billet review initiative of 2011.

2001      **JR COSTEP Environmental Health Officer, O-2 Billet Level**  
**Indian Health Service, Minot, ND**

**O-1**

## **Professional Experience**

**Applied Sciences Manager, Environmental Health Support**  
**Anchorage, Alaska**  
**Alaska Native Tribal Health Consortium**

**O-6 Billet**  
Jan 2010 – Present

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### ***Duties***

- Manage the Anchorage Service Unit Field Environmental Health Program (similar to responsibilities of IHS District Sanitarian).
- Oversee completion of a number of complex research projects, typically serving as Principle Investigator of the research team.
- Serve as Project Director for several “special” projects. Current projects include an EPA funded tribal air quality program, IHS funded water and sanitation education program, EPA funded brownfields program, IHS funded water fluoridation program, and a tribal healthy homes program funded through the North American Free Trade Agreement.
- Supervise eight environmental health specialists and seven village-based project staff.
- Fundraising to acquire over \$1 million per year in external revenue to support existing programs and staff.
- Manage an annual budget of about \$1.5 million.

### ***Collateral Duties***

- Routinely serve as Acting Director (0-6 billet) of the Department of Environmental Health Support.
- Occasionally serve as acting Senior Director of the Division of Environmental Health and Engineering; this is the largest single program in the US tribal health system.
- Serve as a media spokesperson for the division on topics relating to health.
- Serve on the thesis committees of two University of Alaska graduate students.

### ***Accomplishments***

- Obtained \$1 million from the Commission for Environmental Cooperation, an entity formed through the North American Free Trade Agreement, to reduce need for respiratory medical treatment among a very high risk group of Alaska Native Children.
- Worked with leaders at the University of Alaska to outline a path leading to an accredited undergraduate degree in environmental health science in Alaska. The first course is under development and scheduled to be taught fall 2012. LCDR Ritter led the course development and will serve as a course instructor.

- Co-authored the first publication linking lack of in-house running water in with higher rates of invasive pneumococcal disease (Wenger, 2010).
- Led the development of a methodology for changing human behavior in environmental health. Details of the methodology were presented at the 2011 USPHS Scientific and Training Symposium, EHO Category Day.
- Advised EPA leadership on strategies to address epidemics of respiratory conditions among Alaska Native children through air quality interventions.
- Acquired \$142,000 per year, recurring annually, from the EPA Brownfields Program to develop and implement a program addressing contaminated or blighted sights within Alaska Natives communities.
- Advised EPA officials on implementation of new ultra low sulfur diesel fuel regulations in Alaska.
- Contributed to a publication establishing a relationship between water fluoridation and fewer dental caries among Alaska Native children.

**Sr. Environmental Health Consultant, Environmental Health Support  
Anchorage, Alaska  
Alaska Native Tribal Health Consortium**

**O-6 Billet  
July 2005 – Jan 2010**

***Duties***

- Contribute to original environmental health research which enhances the health of Alaska Natives.
- Provide advanced environmental health technical, program management and consultative services for eight Tribal Health Organizations.
- Work with internal staff to ensure that division activities provide maximum health benefit through provision of sustainable environmental health solutions.
- Work with junior environmental health professionals to increase state-wide environmental health capacity.
- Work with stakeholders to develop and maintain public health infrastructure and systems necessary to achieve the ANTHC vision.
- Work with agency administrators, organizational leaders and politicians to support development of sound environmental health policy for the benefit of Alaska Natives.

***Collateral Duties***

- Routinely serve as acting program director (0-6 billet).
- Serve as a media spokesperson, representing the division on environmental health topics.
- Coordinate the Alaska Area Environmental Health Officer COSTEP program.

***Accomplishments***

- Originated and coauthored the first study linking lack of piped water service with higher rates of acute respiratory infections (Hennessy, 2008).
- On five occasions, provided expert testimony for Alaska legislators that helped to shape environmental public health policy as it relates to rural Alaska Natives.
- Received a \$1 million grant from EPA to develop and administer a program to assist Alaska Native tribes with addressing ambient air quality issues.

- Collaborated with CDC National Center for Environmental Health to develop an intermediate-level potable water module for the Environmental Health Training in Emergency Response course.
- Developed a new technology that allows for real-time surveillance of waterborne fluoride levels in Alaska's small and remote water systems.
- Represented the Environmental Health Officer category and the Alaska Area on the USPHS Uniform Working Integrated Project Team.
- Obtained a 3-year \$350,000 grant from the CDC to develop, implement and evaluate a program to encourage healthy water use practices in four villages receiving in-house water and flush toilets.

**Staff Environmental Health Specialist, Environmental Health Support**  
**Anchorage, Alaska**  
**Alaska Native Tribal Health Consortium**

**O-4 Billet**  
 May 2003–July 2005

***Duties***

- Coordinated Water Fluoridation activities for Alaska Native Tribes
- Provided general environmental health support services for eight Tribal Health Organizations in Alaska.
- Provided comprehensive environmental health services for the Metlakatla Indian Community.

***Collateral Duties***

- Served as Chair of the Alaska Fluoride Committee
- Member of the Alaska Oral Health Workgroup
- Member of the Indian Health Services Sanitation Deficiency System (SDS) Review Committee.
- Worked with representatives of EPA, IHS and States of Alaska to create a new SDS scoring criterion which rewards communities that optimally fluoridate their water supply.

***Accomplishments***

- Developed a new model for delivering environmental health services for Alaska Native tribes. The model combines traditional field environmental health services with advanced research and project management techniques. The model is similar to that used in private environmental consulting firms. Resources are acquired from external sources and leveraged against funds providing by the IHS compact.
- As a recipient of the National Environmental Health Association's Ambassador Exchange Award, completed a comparative analysis of the Alaskan and Canadian Northwest Territory's water and sanitation programs. Findings were published in the Journal of Environmental Health (Ritter, 2006).
- Received a \$90,000 grant from the CDC and IHS oral health programs to develop and test water fluoridation remote monitoring technology.
- Authored a white paper summarizing the health benefits of improved water service that was presented to EPA Administrator David Johnson to help justify continued investment in sanitation facilities construction in rural Alaska.

**Chief Environmental Health Officer, Environmental Health Support  
Bethel, Alaska  
Yukon Kuskokwim Health Corporation**

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**O-4 Billet  
Sept 2001 – May 2003**

***Duties***

- Administer Alaska's largest regional environmental health program serving sixty Alaska Native tribes. Responsibilities include identifying public health need, establishing program goals and monitoring activities to ensure excellent service delivery.
- Supervise three field environmental health officers and one laboratory specialist.
- Oversee the water & wastewater operator training program. Responsibilities include planning, organizing and assisting with instruction of approximately nine training courses annually. Additional responsibilities include budgeting, cost tracking and obtaining funds.
- Provide staff training and technical support in all areas of environmental health.
- Serve as acting director of the Office of Environmental Health and Engineering (OEHE) on an interim basis. This responsibility includes overseeing four programs within the OEHE and providing direct supervision of ten employees.

***Collateral Duties***

- Served as supervisor for an EPA-certified drinking water laboratory from 2002 to 2003.

***Accomplishments***

- Developed new survey instruments for the office.
- Created a new data management system for rabies vaccination records.
- Oversaw the training and certification of over eighty village water system operators.

**Field Environmental Health Officer, Office of Environmental Health  
Bethel, Alaska  
Yukon Kuskokwim Health Corporation**

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**O-2 Billet  
Sept 1999 – Sept 2001**

***Duties***

- Survey drinking water, sewage and solid waste disposal facilities and make recommendations to correct deficiencies.
- Conduct institutional environmental health surveys at village health clinics, Head Start centers and other facilities.
- Promote the rabies prevention program by training and supervising village-based lay vaccinators, investigating animal bite incidents, and vaccinating animals against rabies.
- Manage the office food sanitation program. Responsibilities include surveying facilities, investigating suspected botulism cases and promoting safe food practices.
- Perform laboratory analysis of water samples and other duties associated with the operation of an EPA certified water laboratory.

***Collateral Duties***

- Served on the YKHC Boils Committee from 2000 to 2002. This committee was formed to address an epidemic of antibiotic-resistant *Staphylococcus aureus* in the region.
- Served as training coordinator for the Office. Coordinated water and wastewater operator training courses and served as the lead course instructor.
- Coordinated the Office rabies program activities from 1999 to 2002.

***Accomplishments***

- Completed over 100 village visits to provide environmental health services.
- Contributed an article to the local newspaper about the risks of drinking untreated water.
- Assisted CDC personnel with an investigation of an MRSA outbreak in the region.
- Assisted State of Alaska Public Health Nurses with a botulism outbreak investigation.

**COSTEP Environmental Health Officer  
Minot, North Dakota  
Indian Health Service**

**O-1 Billet  
May 1999 – Aug 1999**

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***Duties***

- Performed food surveys for establishments on North Dakota’s three reservations.
- Assisted the District’s fulltime sanitarians with tasks as instructed

***Collateral Duties***

- Instructed a series of women’s self defense courses on the Turtle Mountain reservation, Belcourt, ND, July 1999.
- Assisted with a two multi-day rabies vaccination and spay/neuter clinics offered by the Remote Area Medical Team.

***Accomplishments***

- Completed over 20 food surveys during the 90-day assignment.
- Approximately 15 women were taught situational self-defense and escapement techniques during the self defense courses in Belcourt, ND.

**Characteristics of Career Officer & Service to Corps**

**Professional Memberships**

American Academy of Sanitarians	2006 – present
National Environmental Health Association (NEHA)	1999 – present
Commissioned Officers Association of the USPHS (COA)	1999 – present
Alaska Environmental Health Association (AEHA)	1999 – present

## **Committee Memberships**

Master's Thesis Committee- James Temte	2010 – present
Master's Thesis Committee- Jennifer Skarada	2010 – present
Alaska Healthy Schools Workgroup	2010 – present
Alaska Health Homes Workgroup	2010 – present
Alaska Water and Sanitation Workgroup	2006 – present
Alaska Oral Health Workgroup	2004 – present
Fluoride Committee	2004 – 2008
USPHS Uniform Working Integrated Project Team	2007

## **Associate Recruiter Program**

Recruitment Visit, Indiana University Purdue University Indianapolis	November 2007
Recruitment Presentation, Eastern Kentucky University	November 2006
Recruitment Presentation, Eastern Kentucky University	December 2005
Recruitment Presentation, Eastern Kentucky University	December 2004
Recruitment Presentation, Indiana State University	January 2002

*\*Four current PHS EHOs were recruited during the above visits.*

## **Leadership Positions Held**

Alaska Environmental Health Assoc. Blue Ribbon Committee, Chair	2010 – present
Alaska Area Commissioned Corps Awards Board, Alternate Member	2006 – present
Alaska Water and Sanitation Workgroup	2007 – present
Rural Alaska Sanitation Advisory Committee, Alternate Member	2004 – 2006
State of Alaska Fluoride's Committee, Chair	2003 – 2007
Alaska Environmental Health Association, President	2006
City of Bethel Parks and Recreation Committee, Chair	2002 – 2003

## **Mentor Program**

Coordinated Alaska Area COSTEP Program. Approximately 45 COSTEPS were called to active duty under my leadership. Many of these COSTEPS have gone on to careers in the USPHS.	2003-Present
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## **Civic Volunteer Activities**

Alaska State Science Fair, Judge	2011
Alaska State Science Fair, Judge	2008
Alaska State Science Fair, Judge	2006

## **Deployment Activities**

### **Basic Readiness Status**

Qualified

### **Deployments**

Operation Arctic Care, Nome, Alaska, US Army Veterinary Team	2006
Operation Arctic Care, Kotzebue, Alaska, US Army Veterinary Team	2004
Operation Arctic Care, Bethel, Alaska, US Army Veterinary Team	2002

## **Awards Section**

### **Uniformed Services Awards:**

PHS – Achievement Medal	2010
PHS – Achievement Medal	2003
PHS – Citation Medal	2001

### **Unit Awards:**

PHS – Outstanding Unit Citation	2010
PHS – Outstanding Unit Citation	2003

### **PHS Service Awards:**

PHS – Isolated Hardship Ribbon	2000
PHS – Hazardous Duty Ribbon	2000
PHS – Bicentennial Unit Commendation Ribbon	1999

### **Military Campaign, Service, and Training Awards:**

U.S. Army – Certificate of Achievement	2005
U.S. Army – Achievement Medal	2004
U.S. Navy – Certificate of Appreciation	2001

### **Association and Organization Awards:**

USPHS JOAG – Junior Officer of the Year	2010
CDC – Charles C. Shepard Science Award (nomination)	2009
Indian Health Service – Director’s Award	2009
Indian Health Service – Environmental Health Specialist of the Year (national)	2006
Alaska Native Tribal Health Consortium- Employee of the Year	2006
Eastern Kentucky University College of Health Sciences – Outstanding Alumni	2006
NEHA – Sabbatical Exchange Ambassador Award	2004
CDC/NEHA – Environmental Health Research Competition Winner (student)	1999



## Professional Activities

### *Publications*

Hennessy, T.W., **Ritter, T.**, Singleton, R.J., & Gessner, B.D. (2007). Relationship between In-Home Water Service and Lower Respiratory Infections—Alaska, 1999-2002. *EPI Bulletin* No. 9.

Hennessy, T.W., **Ritter, T.**, Holman, R.C, Bruden, D.L., Yorita, K.L., Bulkow, L., Cheek, J.E., Singleton, R.J., & Smith, J. (2008). The relationship between in-home water service and the risk of respiratory tract, skin and gastrointestinal tract infections among rural Alaska Natives. *The American Journal of Public Health*, 98(11), 2072–2078.

**Ritter T.** (2000) Resource Efficient Desalinization: Protecting the Public Health through Increased Availability of Fresh Water [Abstract]. *Journal of Environmental Health*.43

**Ritter T.** (2006) Have you Thanked Your Water/Wastewater System Operator Today? *Pumphouse Pipeline*. Alaska Native Tribal Health Consortium Press.

**Ritter T.** (2006) Water & Wastewater Operators Help Quell Diseases, *Mukluk Telegraph*.

**Ritter T.** (2007). Sharing environmental health practice in the North American Arctic: a focus on water and wastewater service. *Journal of Environmental Health*. 69(8), 50-54.

Wenger, J.D., Zulz, T., Bruden, D., Singleton, R., Bruce, M.G., Bulkow, L., Parks, D., Rudolph, K., Hurlburt, D., **Ritter, T.**, Klejka, J., & Hennessey, T. (2010). Invasive pneumococcal disease in Alaskan children: Impact of the seven-valent pneumococcal conjugate vaccine and the role of water supply. *The Pediatric Infectious Disease Journal*, 29(3), 251-256.

### *Major Presentations*

2011, EPA Headquarters, Washington, DC. “A Briefing for EPA and HUD Leadership: Respiratory Health and Health Homes Project.”

2011, Water and Health Conference: Where Science Meets Policy, Chapel Hill, NC. “Underutilization of Water Services in Alaska Native Villages.”

2011, Channel 2 News (KTUU), Anchorage, AK. “Report on Water Fluoridation in Rural Alaska.”

2011, Greener Homes National Summit, Denver, CO. A Collaborative Project to Address Respiratory Disease in Alaska Native Children through Home Remediation.” (**Invited Speaker-Plenary Session**)

2011, Alaska Environmental Health Association Annual Conference, Anchorage, AK. "What Environmental Health Professionals need to know about Health Education."

2011, USPHS Scientific and Training Symposium, New Orleans, LA, "Is Health Education a Useful Tool for Environmental Health Officers?" (**Category Day Speaker**)

2011, Alaska Dietetic Association Annual Conference, Anchorage, AK, "Living without the Basics in the 21<sup>st</sup> Century." (**Keynote Speaker**)

2010, American Public Health Association Annual Conference, Denver, CO. "Public Health Implications of Energy Development in Nuiqsut, Alaska"

2010, National Tribal Leaders Summit, Juneau, AK. "Can Breathing Poop make you Sick?"

2010, International Joint Commission, Expert Consultation on Northern Transboundary Air Quality Issues, Whitehorse, Yukon, Canada. "Overview of Air Quality Issues of Interest to Alaska Native People"

2009, Expert Testimony for Alaska State Legislature, Health Caucus, Juneau, AK, "Health Benefits of Modern Water and Sanitation Services in Rural Alaska" (**Legislative Testimony**)

2009, Special Briefing for Members of the Alaska State Legislature, Juneau, AK "The Health Benefits of Piped Water Service in Rural Alaska" (**Legislative Testimony**)

2009, Expert Testimony for Alaska State Legislature, Health Caucus, Juneau, AK, "Energy and Health in Rural Alaska" (**Legislative Testimony**)

2009, Indian Health Service Summit, Denver, CO, "Health Benefits of Improved Water Service in Indian Country"

2009, American Public Health Association, Philadelphia, PA, President's Session, "Water and Health: looking under the surface" (**Special President's Session Speaker**)

2009, American Public Health Association, Philadelphia, PA, "Assessing Policy Decisions related to Water Distribution Systems in Alaska Native villages"

2009, Alaska Native Health Research Conference, Anchorage, AK. "The Water and Sanitation Challenge" (**Plenary Session Speaker**)

2009, Alaska Conference on Tribal Environmental Management, Anchorage, AK, "Emerging Issues in Alaskan Environmental Health"

2009, National Oral Health Conference, Portland, OR, "Introducing the Remote Observation System: an innovative water fluoridation surveillance system for small communities."

2008, USPHS Scientific and Training Symposium, Tucson, AZ, "Health Implications of Climate Change in Rural Alaska" (**Category Day Speaker**)

2008, Environmental Health Training in Emergency Response Course, Tucson, Arizona, "Water and Sanitation in Emergency Response: Role of the Environmental Health Officer." (Guest Instructor)

2008, Community Action for a Renewed Environment (CARE) Conference, Chicago, IL, "Increased Capacity in Environmental Health Service Delivery."

2008, Alaska Water and Wastewater Association Annual Conference, Anchorage, AK, "Maximizing the Health Benefits of In-home Water Service in Rural Alaska."

2008, National Environmental Health Association Annual Educational Conference, Tucson, AZ, "Overview of the Alaska Rural Utility Collaborative: a program evaluation"

2007, Alaska Health Summit, Anchorage, AK, "Health Implications of Climate Change in Newtok, Alaska."

2007, Indian General Assistance Program Annual Conference, Fairbanks, AK. "Cancer and the Environment"

2007, Guest Lecturer at University of Alaska College of Health and Social Welfare, Anchorage, AK, "Establishing Healthy Rural Alaskan Communities."

2007, Special Presentation for USEPA Leadership, Presented Via Phone Conference, "The Relationship Between Infectious Diseases and In-home Water Service among Alaska Natives"

2007, South East Alaska Sanitation Deficiency System Annual Planning Meeting, Juneau, AK. "Optimal community Water Fluoridation"

2006, National Environmental Health Association Annual Educational Conference, San Antonio, TX, "Explaining the Mills-Reinicke Phenomenon: a closer look at the health benefits of modern water service."

2006, National Tribal Forum on Environmental Science, Ocean Shores, WA, "The Relationship between In-House Running Water and Rates of Infections."

2006, Alaska Health Summit Anchorage, AK, "The Relationship Between Infectious Diseases and In-home Water Service among Alaska Natives"

2006, Expert Testimony for the Alaska State Legislature, Legislative Press Release, Juneau, AK "Value of Preventative Health Services" (**Legislative Testimony**)

2006, Alaska Environmental Health Association, Anchorage, AK, "Emerging Issues in Alaska Environmental Health"

2006, Guest Lecturer at Eastern Kentucky University, Potable Water Class, Richmond, KY, "A Closer Look at the Health Benefits of Modern Water Service."

2006, Guest Lecturer at University of Alaska College of Health and Social Welfare, Anchorage, AK, "An Alaskan Challenge; providing water and wastewater services in rural Alaska."

2005, Expert Testimony for the Alaska State Legislature, Full Senate, Juneau, AK "Water Fluoridation" (**Legislative Testimony**)

2005, Expert Testimony for Alaska State Legislature, House Community and Regional Affairs Committee, Juneau, AK "Water Fluoridation" (**Legislative Testimony**)

2005, Government of Northwest Territories Annual Meeting, Yellowknife, NWT, Canada, "Overview of Environmental Health Practice in Alaska."

2005, National Environmental Health Association Annual Educational Conference, Providence, RI "Sharing Environmental Health Practice in the North American Arctic."

2005, Alaska Conference on Tribal Environmental Management, Anchorage, AK. "Alaskan Perspective on Environmental Health Practices in the Northwest Territories"

2005, Guest Lecturer at University of Alaska College of Health and Social Welfare, Anchorage, AK, "Providing Safe Drinking Water in Rural Alaska; challenges and opportunities."

2004, National Environmental Health Association Annual Educational Conference, Anchorage, AK, "Lessons Learned from Histories Worst Water Fluoridation Incident."

2002, A Special Briefing for EPA Administrator Christine Todd-Whitman, "Overview of an EPA-Certified Drinking Water Lab in a Remote Area."

1999, National Environmental Health Association Annual Educational Conference, Nashville, TN, "Resource Efficient Desalinization: improved public health through increased availability of fresh water."