



# Public Health Update

Friday, May 30, 2008

## The NPS Public Health Program

Because of the large visitation to our national park system, the NPS has long maintained a public health program. The park system brings people together from all over the country and the world to enjoy our natural wonders, our cultural heritage and our history. Bringing people together in groups, especially from far flung locations, provides the opportunity for them to share... their illnesses. The NPS system also brings people purposefully close to nature and everything that nature has to offer, including, microbial wonders, occasionally of the pathogenic kind.

Bringing people together in these places and in touch with nature is a very good thing, contributing, in fact, to their health and well being. However, it can also expose them to the potential of physical, chemical and biologic agents that can detract from health. It's the charge of the NPS Public Health Program to work with park unit managers and staff to limit the potential of the negative and accentuate the positive.

8.2.5.5 of the NPS Management Policies state: "The Service will work to identify public health issues and disease transmission potential in the parks and to conduct park operations in ways that reduce or eliminate these hazards. Park managers will pursue these goals with technical assistance provided under the auspices of a Service-wide public health program. The public health program will use the consultation services of commissioned officers of the U.S. Public Health Service."

Located within the WASO/Associate Director of Visitor and Resource Protection, Office of Public Health (OPH), the public health program consists of almost 40 men and women on assignment to NPS from the Department of Health and Human Services Public Health Service (one of the seven uniformed services). These commissioned officers and three civil service employees collectively work to help NPS protect and promote the health of almost 300 million visitors to our system each year.

Immediately reporting to the Office of Public Health are Public Health Consultants (PHC's). These officers serve broadly and are located around the system, covering areas that are roughly aligned with the NPS regional boundaries. Their task is to be in the parks, to understand each unique park unit, the potential public health hazards created by that park, and to evaluate what degree of control we have over those hazards. Using all of this information, the

PHC's work with park managers and staff to improve visitor protection efforts.

Most of the PHC's time is spent on four "core" subject areas:

- Drinking water safety;
- Waste water disposal;
- Food safety; and
- Zoonotic/vector borne diseases.



CAPT Theresa McDarmont Evaluating A Drinking Water System

Any and all public health issues are fair game, however, and each park presents a unique set of issues, based on geography, size, visitation, climate and other variables. If you have a public health related question, please feel free to contact one of the PHC's nearest you at the numbers listed below.

Our PHC's have broad backgrounds and experience in handling a variety of public health issues. The PHC's and their duty stations are:

Lowell, MA  
CAPT Barry Hartfield (978) 970-5033

Washington, DC  
CAPT Richard Durrett (202) 619-7070

Atlanta, GA  
CAPT Theresa McDarmont  
(404) 562-3124 ext 549

Omaha, NE  
CAPT Robert Reiss (402) 661-1718

Santa Fe, NM  
CAPT Joe Winkelmaier (505) 988-6040

YELL  
LCDR George Larsen (307) 344-2273

Denver, CO  
LT Adam Kramer (303) 969-2922

Flagstaff, AZ  
LT Matt Walburger (928) 226-0168

Oakland, CA  
CAPT Paul Robinson (510) 817-1375

Seattle, WA  
CAPT John Leffel (206) 220-4270

In addition to the PHC's, the Office of Public Health has two staff members who work nation-wide on issues that cross geographic and regional boundaries.

CDR David Wong, MD, is the NPS Medical Epidemiologist. His primary duty is to establish and maintaining a system-wide disease surveillance system. Drawing information from various park data sources and systems maintained by local/state health agencies, this effort is intended to:

- detect disease transmission and outbreaks
- respond and limit impact
- improve our protective measures.

David is stationed in Albuquerque, New Mexico.

LT Amy Chanlongbutra, stationed in Washington, D.C. is in charge of the program's science efforts. The public health program strives to base all of its advice on sound, up to date science. Among her tasks are to identify service wide public health questions, summarize the state of our current knowledge on these issues and publish Public Health Science Guidance Documents for use by OPH staff, other NPS programs, regions and parks. She coordinates an inter-program steering group called ZED (zoonotic and environmentally transmitted diseases). This group provides coordinated guidance on issues that cross all of the four programmatic areas

involved (public health, risk management, IPM, and wildlife health).

Additional Public Health Service officers are assigned directly to parks, regions or other NPS programs to carry out specific public health duties related to that assignment. These duties include risk management, environmental compliance, air quality, and the public health and safety aspects of NPS engineering activities/projects.

Three parks have a public health professional on staff to handle their specific units. These are:

GATE CDR Craig Ungerecht (718) 354-4693  
SEKI Paul Schwarz (559) 565-3144 (Paul also assists the OPH by maintaining our web site and helping to conduct work at other parks in the PWR)

LAME J. Shannon Swann (702) 293-8985

All of these staff members are supported by Sonya Coakley, located at WASO. Sonya manages personnel and budget for the program.

The Director of the Office of Public Health, located at WASO is, CAPT Chuck Higgins (202) 513-7217.

## Evaluating the diseases that National Park Service employees are exposed to from insects and wildlife

### Overview

The National Park Service Office of Public Health and the Centers for Disease Control and Prevention (CDC) are working together to try, over time, to better define potential visitor risk from zoonotic and vector borne diseases.



Zoonotic diseases are illnesses shared by other animals and people and vector borne diseases are those that are transmitted to people indirectly by a live intermediary such as a

mosquito or tick. Examples of zoonotic diseases include Rocky Mountain spotted fever, plague, Lyme disease, tularemia, and West Nile Virus. Zoonotic diseases can range from being mild to a severe illness. This means that a person can be infected with a zoonotic disease and never know it.

Because visitors are more difficult to study and since NPS employees are more likely to be exposed to one of these agents in a park, we are studying employees in the hopes of eventually using this information to estimate visitor risk. This has the added benefit of learning about employee exposures.

In time, we hope to use what we learn to help us understand what diseases are present in the national park system and how all people entering the park can best be protected.

### Study Participation

To pilot this idea two parks (ROMO and GRSM) in very different areas of the country have been chosen, in part for their proximity to CDC researchers and in part to cover disease agents that vary by geography and climate.

Discussions were initially held with park management to explain the purpose of our efforts and to gain their support. As the study begins, meetings with park personnel have or are being held to explain the study and what their potential participation would entail. The study was started in GRSM this month and will begin at ROMO in June.

Permanent employees who plan on working in the park for at least a year may participate. Participants will be asked questions about job activities and to give a blood sample. Then, one year later, they will be asked to do this again.

Blood samples will be tested by CDC for zoonotic diseases in order to see what an employee was exposed to in the past (this establishes a baseline). This blood will not be used to test for anything else or for any other purpose.

Participants will receive a \$25 gift card upon entry into the study, and then another gift card upon successful completion of the study. They will also privately receive their personal test results showing what diseases they may have been exposed to.

Participation is completely voluntary. A study participant may change their mind at any time. Participation will help us to learn what zoonotic diseases are present in the park, and how to better protect all park visitors from these diseases.

If these pilot efforts are useful and go well, we hope to expand to other NPS units. For more

information, you can contact CDR David Wong, MD (david\_wong@nps.gov).

### "Ranger Radar"

The Office of Public Health would like to "enlist" the help of all NPS employees at all of our park units in order to help us detect and respond to disease transmission this summer season. Disease surveillance systems, no matter how sophisticated, often depend heavily on an alert clinician, noticing an unusual event or an unusual number of cases of more common illnesses, indicating the beginnings of an outbreak.

The equivalent to this "alert clinician" in our system are all of the NPS employees, particularly the LE and interpretation personnel who have such constant contact with our visitors. You have a good feel for what's "normal." Perhaps you usually hear about a couple of upset stomachs a week and suddenly four people have complained in a single day. If it's not "normal" or if you feel you are seeing/hearing any type of potential public health issue, please feel free to contact one of the public health professionals listed in this update or give Dr. Wong a call at his office in Albuquerque (505) 248-7806, or on his cell at (202) 538-9969.



In Partnership for nearly 100 years, the National Park Service and the United States Public Health Service have worked together to protect the health of visitors in Americas Parks!

### Program Websites:

Internal:

<http://inside.nps.gov/publichealth/index.htm>

External:

[http://www.nps.gov/public\\_health](http://www.nps.gov/public_health)