NATIONAL PARK SERVICE

BOARD OF REVIEW REPORT



ERIC YORK

DATE 5/01/2008

NATIONAL PARK SERVICE U.S. DEPARTMENT OF THE INTERIOR



BOARD OF REVIEW REPORT ERIC YORK FATALITY

DATE 05-01-08

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NATIONAL PARK SERVICE

ERIC YORK ACCIDENT INVESTIGATION

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David DiTommaso, Regional Risk Manager, Intermountain Region
National Park Service

The above identified employees hereby agree, by virtue of their signature, to the public release of their names in conjunction with this report.



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Preface

This report is provided in accordance with the National Park Service (NPS) Director's Order/Reference Manual 50B, Chapter 5, Section 5.5 for the purpose of relaying the facts, incident investigation results, and recommendations for future prevention associated with the death of a National Park Service employee, Eric York, Grand Canyon National Park (GRCA), November 2, 2007. This report is based on a thorough incident investigation and root cause analysis performed by a Serious Incident Investigation Team (SAIT), and a Board of Review.

Clearly Eric York was a hardworking and dedicated employee who gave of himself fully to understand and protect the wildlife at Grand Canyon National Park and at other locations around the globe. Eric's family, friends and co-workers and the other employees of Grand Canyon National Park and the National Park Service have suffered the tragic loss by his passing. We hope to learn from Eric York's experiences and that what is learned will benefit all who follow in his footsteps.



Executive Summary

National Park Service Wildlife Biologist, Eric York, age 37, a term employee at Grand Canyon National Park, died sometime between October 31 and November 2, 2007 at his park residence at 34 Coconino Street at the South Rim of Grand Canyon National Park. Although it was suspected as early as November 6th that York died of *Yersinia pestis* (plague) that initial determination was not confirmed until November 16, 2007 by the Center for Disease Control (CDC).

It is likely York was exposed to the plague on Friday, October 26 when he recovered a dead mountain lion or Puma, identified as P13 at a remote location in Grand Canyon National Park. York transported the animal to his residence where later in the day he performed a necropsy on the lion in his garage.

York continued to work throughout the weekend, following the necropsy, but began feeling ill. On Tuesday, October 30 after checking his traps in the morning, York visited the park clinic and was assumed to have the flu, although a flu test taken during the visit proved negative. He returned home and his condition worsened.

By Wednesday, October 31, York was feeling ill enough to stay home, forgoing park duties he was known to be passionate about. Although in touch with a co-worker by phone and seen by his roommate's friend during this time, his condition did not raise concerns of a more serious ailment. Sometime between 1900 hrs on October 31 and 0815 hrs on November 2, 2007, Eric York died in his park residence, laying on his couch in his living room. His body was discovered by co-workers on the morning of November 2, 2007.

The cause of York's death remained under investigation from the date of his passing until November 16th when it was conclusively attributed to *Yersinia pestis*, pneumonic plague.



Findings

FINDINGS

ENVIRONMENT

- York's death, confirmed post mortem, was from infection by the plague bacterium, *Yersinia pestis*.
- York had close contact with a mountain lion carcass about four days before becoming ill.
- The mountain lion carcass tested positive, post mortem, for *Yersinia pestis*.
- York believed the mountain lion was killed by another lion.

HUMAN

- York skinned and performed a necropsy on the carcass including opening the body cavity.
- York performed the necropsy in the garage at his quarters in the park.
- Photographs show York was not wearing gloves.
- There was no evidence that York wore respiratory protection when handling, skinning or performing the necropsy on the lion.
- There is no evidence that York advised the physician at the GRCA Clinic that he had been in close contact with wildlife in the recent past.
- York's college education shows he took and passed a course entitled, "DISEASES/PARASITES WILDLIFE." (Course content unknown).

MANAGEMENT

- York's immediate supervisor said the park sends small animals (birds and rodents) off-site for necropsy since laboratories are better suited to test for avian flu and plague. Mountain lions were generally not subjected to necropsies in the park. Deer had been subjected to field necropsies routinely in the past by park biologists.
- Park records do not show York having had respiratory protection training, as required by 29 CFR 1910.134 and 29 CFR, Part 1960.
- Park records do not show York having been medically evaluated to wear a respirator, as required by 29 CFR 1910.134 and 29 CFR, Part 1960.
- Park records do not show York having been fit-tested with a respirator as required by 29 CFR 1910.134 and 29 CFR, Part 1960.
- The park does not have a written respiratory protection program as required by 29 CFR 1910.134 and 29 CFR, Part 1960 with required work-site specific procedures and elements for respirator use by wildlife biologists and biology technicians at GRCA.
- Park records do not show York was ever trained on the potential hazards of disease transmission from wildlife to humans.

- There were no Standard Operating Procedures (SOP's) or Job Hazard Analysis (JHA'a) for skinning, opening the body cavity or performing necropsy procedures on wildlife.
- There was no written certification or evidence that the park had conducted a hazard assessment to determine the required use of personal protective equipment (PPE) by Eric York, other wildlife biologists or biology technicians as required by 29 CFR 1910.132 and 29 CFR 1960.
- There was no written certification or evidence that the park had provided PPE training for Eric York, other wildlife biologists or biology technicians as required by 29 CFR 1910.132 and 29 CFR 1960 to assure that each employee knew what PPE was necessary, when it was necessary, how to properly don, doff, adjust and wear PPE, the limitations of PPE and the proper care, maintenance, useful life, and disposal of PPE.
- York's immediate supervisor gave York wide latitude to operate independently and did not assign or direct York's daily work.
- York's immediate supervisor was unaware of the particular daily activities undertaken by York and was unaware that York had performed the necropsy on the infected lion or on a previous lion until after the necropsies had been done.
- York's immediate supervisor said PPE, *i.e.*, gloves and respiratory protection, were available for York to use.
- York's immediate supervisor did not assign, direct or supervise the use of personal protective equipment, including gloves or respiratory protection, by York.





Recommendations

The direct cause of this particular incident was found to be several factors, specifically unsafe work practices and failure within park supervision and policy.

- 1. Eric York did not wear personal protective equipment (PPE), specifically, body substance isolation equipment (gloves, mask/respirator).
- 2. Eric York did not handle and remove the dead lion appropriately.
- 3. Supervisor failed to review job task and complete a job hazard analysis (JHA).
- 4. Supervisor did not monitor employee activities and work practices appropriately.
- 5. Critical information was not communicated to the attending physician.

Recommendation 1:

Leadership and Personnel Management

- Personnel and associated job task(s) need to be monitored with current Employee Performance Appraisal Plan (EPAP) reflecting rating criteria.
- Supervisory oversight of training and implementation of policy should be conducted and documented to assure personnel are fully aware of the duties of their position and their job performance requirements. Supervisors must determine what specific tasks should and should not be performed.
- Personnel need to know what hazards are associated with their job especially those working independently and those potentially coming in contact with a zoonotic disease.
- Activity reports need to be completed frequently by field personnel to assure projects and associated work are performed, and completed as planned.
- Supervisors need to increase their interaction with subordinate personnel involved in field work and projects, to personally observe employee work habits and to assure accuracy and safe job performance.
- Managers and division chiefs need to monitor, review and evaluate work
 operations to assure that first line supervisors are providing proper training for
 their subordinates and that first line supervisors are assuring compliance with safe
 work practices, policies and procedures.

Recommendation 2:

Safety and Health

- Develop and implement a documented (written) safety and health program which
 clearly identifies lines of responsibility and authority for assessing occupational
 safety and health risks, including the risk of zoonotic and infectious disease
 transmission and for developing and assuring the implementation of risk
 management controls for the park as a whole and the Natural Resources and
 Wildlife Management group in particular.
- Where respiratory protection is necessary to protect the health of employees, develop and implement a written respirator program for all employees in the park, and in particular for the Natural Resources and Wildlife Management group, and assure that employees use respirators in accordance with that program. The written respirator program should clearly identify the lines of authority and responsibility for determining which employees are required to wear respiratory protection and meet all OSHA requirements including but not limited to respirator selection, fit-testing, medical evaluation and training.
- Develop and implement a written personal protective equipment (PPE), program
 for the park, and in particular for the Natural Resources and Wildlife Management
 group which clearly identifies lines of responsibility and authority for assuring
 that a PPE hazard assessment is conducted as required by OSHA standards.
 Ensure that employees are properly trained in the use of this equipment and that
 PPE is properly selected, used and maintained.
- Risk Assessments need to be completed for field operations, specifically pertaining to resource management activities and wildlife programs, to identify safety and health risks.
- Supervisors and personnel need comply with GRCA 8211, Job Hazard Analysis (JHA) requirement. Supervisors, in particular those in the Natural Resources and Wildlife Management group, need to develop individual JHA(s) for handling dead wildlife to assure appropriate and proper personal protective equipment (PPE) is provided and used correctly.
- Supervisors and personnel need to comply with GRCA 8221 SOP, relating to backcountry travel and communication procedures, by alerting the GRCA Communication Center prior to departure and advising their travel plans, location and duration of travel, and assuring they are familiar with relevant emergency procedures.
- Supervisors need to assure appropriate safety and health training is conducted and documented.

Recommendation 3:

Policy and Procedure

- Managers and division chiefs need to comply with NPS Occupational Safety and Health Program (RM 50B), and assure that all supervisors and subordinate personnel are actively communicating with the park Safety Officer. Work programs need to be reviewed and evaluated for safety related issues.
- GRCA must develop written hazard specific programs and certifications where written programs and certifications are required by OSHA standards applicable to work performed in the park. Those written programs must include, but are not limited to, a written respiratory protection program in accordance with 29 CFR 1910.134 and written certifications that the park has assessed the workplace to determine if hazards are present which necessitate the use of personal protective equipment (PPE), in accordance with 29 CFR 1910.132. The park shall provide a report to Regional Risk Manager which specifies which written programs and certifications the park has determined are necessary under the OSHA standards and a statement that those programs have been developed, reduced to writing and implemented within 120 days of receipt of this recommendation.
- The GRCA Mountain Lion Management Plan needs to be reviewed and updated to include procedures on handling dead animals. The plan needs to identify the appropriate PPE and the proper packaging, removal and safe transportation of the dead animal.
- Risk assessments and JHA(s) need to be completed prior to beginning a new task and hiring new employees. JHA(s) need to be reviewed regularly and evaluated for changes in operations or work conditions.
- GRCA employees seeking medical treatment should be counseled to advise the
 attending medical staff of their occupation when being treated. Conversely, the
 GRCA Clinic needs to ask employees their occupation and specific job task when
 providing medical services to help determine if the employee has been exposed a
 work related disease.