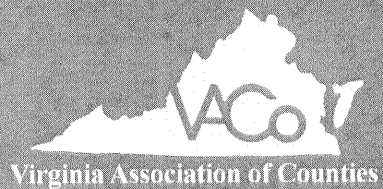


Recognizing the Best in County Government Programs!



2014 Achievement Awards



2014 VACo Achievement Awards

Deadline: June 2, 2014

Application Form

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 2, 2014.**

Program Information

Locality Prince William County
Program Title Medical Physical Program
Program Category Health and Human Services

Contact Information

Name Stephen Yannarell
Title Battalion Chief
Department Fire and Rescue
Complete Mailing Address 1 County Complex Court
Telephone # 703-792-6388 Fax # 703-792-7691
E-mail syannarell@pwcgov.org

Signature of county administrator or chief administrative officer

Name Melissa S. Peacor
Title County Executive
Signature Melissa S. Peacor

Call for Entries

VACo 2014 Achievement Award Entry

Prince William County Department of Fire and Rescue

Medical Physical Program

Abstract of the Program

Prince William County's fire and rescue service is provided through a combination of career and volunteer firefighters and emergency medical technicians. The combined personnel of the Prince William County Department of Fire and Rescue and the County's eleven volunteer fire and rescue companies comprise the Fire and Rescue Association (FRA). Collectively, these organizations work together to provide high quality and efficient fire protection, emergency medical services, and safety education to the community of Prince William County.

Establishment of an annual medical physical program was a long time goal for fire and rescue administration. After the death of a volunteer in a training event, there was a call to action. A program to provide medical examinations to each operational member of the FRA was established. Members are now provided a comprehensive medical exam at entry prior to engaging in physical training and annually thereafter. The program includes all County public safety agencies as they are the most at risk for job related stress, medical problems, and traumatic injuries.

Problem/Need for the Program

It is no surprise that firefighters have one of the most dangerous jobs in the nation. Between 2003 and 2012, there was an average of 88 firefighter deaths in the line of duty

each year. Excluding traumatic causes, cardiovascular disease is the most common cause of death. In 2008, 46 of the 118 line of duty deaths were due to heart attack. One of those deaths was one of our own firefighters. In November of 2008 we lost a volunteer during a training scenario. It was determined that there needed to be a requirement for candidates for firefighter training to receive a medical physical prior to engaging in physical training to ensure they are medically capable of performing their duties.

Description of the Program

In March 2009, the Board of County Supervisors amended the County Code to require that every person providing fire and/or rescue response, whether paid or volunteer, receive a baseline medical examination upon entering the service and annually thereafter in accordance with NFPA 1582, *Standard on Comprehensive Occupational Medical Program for Fire Departments*. Soon after, a request for proposals (RFP) was drafted to establish a contract for medical services to provide these physical examinations and related medical testing. The RFP called for vendors to provide medical exams, fit for duty exams, return to work exams, immunizations, and random and post-accident alcohol and controlled substance screening.

Prior to this initiative, career members of the fire department received baseline medical evaluation at entry and the periodically thereafter based on their age. Between the ages of 20-29, members were evaluated every 3 years. Members between 30 and 39 were evaluated every 2 years and 40 and older annually. Neither of the evaluations adhered to the NFPA 1582 standard. The volunteer companies within the FRA

Contracts were established with two vendors, one vendor to provide services at a centrally located facility and another to provide services on-site at the individual fire stations. On-site services were obtained for the convenience of volunteer firefighters who frequently have full time jobs and limited availability. The components of the medical examination are:

- A comprehensive review of the employee's medical and occupational history.
- A comprehensive physical examination with emphasis on the cardiopulmonary system, general physical fitness, mental status, skin, blood forming organs, hepatic, renal and nervous systems. Additionally, a life style review with emphasis on smoking history, diet and exercise.
- Complete blood count with differential and platelets, chemistry profile, and lipid profile.
- Urinary analysis for glucose, leukocyte esterase, protein, blood, and bilirubin. Microscopic analysis for red blood cells, white blood cells, casts, and crystals.
- Pulmonary function testing
- 12 lead electrocardiogram (EKG)
- Chest x-ray at entry, then repeated every 5 years or as indicated.
- Audiogram for those exposed to high noise levels on a regular basis.
- Alcohol and controlled substance testing
- Maximal Stress Test, including 12 lead resting and exercise EKG
- Screening for infectious diseases, including Tuberculosis, Hepatitis B, C, and HIV
- Immunizations (based on CDC guidelines)
- Body Fat Measurement

The cost of the program

The members of the FRA utilize a pot of money that is funded through a County budget initiative and doesn't come out of their individual budgets. The initial and annual physical cost is \$800 per physical on average, based on the components of the exam for each individual. Stress tests and chest x-rays are provided on a periodic basis and cost will be higher when these tests are completed. There are roughly 1200 physicals delivered each year which translates to a total cost of \$960,000 annually.

The results/success of the Program

Since the program inception in 2009, the member departments of the FRA have received medical physicals at entry and annually. The simple fact that each member in the service is receiving medical surveillance on an annual basis has improved individual health and accountability as evidenced by the members meeting the medical standard set in NFPA 1582. Additionally, members have had previously undiagnosed medical problems identified and are now receiving proper treatment.

Since 2010, one of the vendors provided a summary of the health data from the period 2010 to 2012. The data examined 201 cases selected at random. This data showed a decrease in overall health risk for the population surveyed. The number of individuals classified as having high blood pressure was decreased by nine people and the number of pre-hypertensive individuals went down by 22. The data also showed that 98 percent of the population had a less than half of the average risk for coronary heart disease.

A single case, may say more for the program and its data. One individual attended his annual physical and following the maximal stress test, was referred to a cardiologist for follow-up on an abnormality in his exercise EKG. The cardiologist recommended exploratory catheterization to determine the cause of the abnormality. The cardiologist found two blocked coronary arteries. The employee had no symptoms and his blocked arteries would likely have gone undiagnosed without this program. Ultimately, the maximal stress test probably saved his life and may have saved a costly worker's compensation claim if he had died on-duty.

Worthiness of an Award

Implementation of the Medical Physical Program which requires each operational member of the combination FRA system to receive a medical physical once each year has improve the health and wellness for County employees in all of public safety and volunteer fire and rescue members. Since its inception, this program has helped identify medical conditions that put individuals at risk before they cause permanent harm. The NFPA 1582 standard is applicable to firefighters, but the other public safety agencies have adopted some of the components into their physicals since they don't have an applicable standard of their own. Health data shows a lower risk for cardiovascular disease and health overall. A healthy workforce makes the County a safer place for the community and for the workers themselves.