

NORRISTOWN FIRE DEPARTMENT

**Annual Medical Evaluation -Physician's Guidance
Administrative Order-40B**

**Effective Date: 1-1-2020
Revised Date:**

NORRISTOWN FIRE DEPARTMENT PHYSICIANS' GUIDANCE REGARDING MEDICAL CLEARANCE AS A FIREFIGHTER

Firefighting and emergency medical response remain the most dangerous occupations in the United States. Research has repeatedly shown the need for high levels of fitness to perform safely in the fire rescue service. The individual's long hours, shift work, sporadic high intensity work, strong emotional involvement, and exposure to human suffering places the job among the most stressful occupations in the world. High levels of stress, intense physical demands, and long term exposure to chemicals and infectious disease contribute to heart disease, lung disease, and cancer – the three leading causes of death and occupational disease disability.

This information is provided as a courtesy to physicians who may be asked to complete a physical for a potential firefighter or emergency medical technician. This information is based on the National Fire Protection Association (NFPA) *Standard 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments*, 2013 Edition.

Essential Job Functions

5.1.1 The fire department shall evaluate the following 13 essential job tasks against the types and levels of emergency services provided to the local community by the fire department, the types of structures and occupancies comprising the community, and the configuration of the fire department to determine the essential job tasks of fire department members and candidates:

- 1)*Performing fire-fighting tasks (e.g., hose line operations, extensive crawling, lifting and carrying heavy objects, ventilating roofs or walls using power or hand tools, forcible entry), rescue operations, and other emergency response actions under stressful conditions while wearing personal protective ensembles and self-contained breathing apparatus (SCBA), including working in extremely hot or cold environments for prolonged time periods
- (2) Wearing an SCBA, which includes a demand valve-type positive-pressure face piece or HEPA filter masks, which requires the ability to tolerate increased respiratory workloads
- (3) Exposure to toxic fumes, irritants, particulates, biological (infectious) and non-biological hazards, and/or heated gases, despite the use of personal protective ensembles and SCBA
- (4) Depending on the local jurisdiction, climbing six or more flights of stairs while wearing fire protective ensemble weighing at least 50 lb. (22.6 kg) or more and carrying equipment/tools weighing an additional 20 to 40 lb. (9 to 18 kg)
- (5) Wearing fire protective ensemble that is encapsulating and insulated, which will result in significant fluid loss that frequently progresses to clinical dehydration and can elevate core temperature to levels exceeding 102.2°F (39°C)
- (6) Searching, finding, and rescue-dragging or carrying victims ranging from newborns up to adults weighing over 200 lb. (90 kg) to safety despite hazardous conditions and low visibility
- (7) Advancing water-filled hose lines up to 2 1/2 in. (65 mm) in diameter from fire apparatus to occupancy [approximately 150 ft (50 m)], which can involve negotiating multiple flights of stairs, ladders, and other obstacles

(8) Climbing ladders, operating from heights, walking or crawling in the dark along narrow and uneven surfaces, and operating in proximity to electrical power lines and/or other hazards

(9) Unpredictable emergency requirements for prolonged periods of extreme physical exertion without benefit of warm-up, scheduled rest periods, meals, access to medication(s), or hydration

(10) Operating fire apparatus or other vehicles in an emergency mode with emergency lights and sirens

(11) Critical, time-sensitive, complex problem solving during physical exertion in stressful, hazardous environments, including hot, dark, tightly enclosed spaces, that is further aggravated by fatigue, flashing lights, sirens, and other distractions

(12) Ability to communicate (give and comprehend verbal orders) while wearing personal protective ensembles and SCBA under conditions of high background noise, poor visibility, and drenching from hose lines and/or fixed protection systems (sprinklers)

(13) Functioning as an integral component of a team, where sudden incapacitation of a member can result in mission failure or in risk of injury or death to civilians or other team members

5.1.2 The fire department physician shall consider the physical, physiological, intellectual, and psychological demands of the occupation when evaluating the candidate's or member's ability to perform the essential job tasks.

5.1.3 Medical requirements for candidates and members shall be correlated with the essential job tasks as determined by 5.1.1.

5.1.4 The fire department shall provide the fire department physician with the list of essential job tasks to be used in the medical evaluation of members and candidates.

Medical Evaluation

6.1. A medical evaluation of a candidate shall be conducted prior to the candidate being placed in training programs or fire department emergency response activities.

6.1.1* The medical evaluation of a candidate shall include a medical history, examination, and any laboratory tests required to detect physical or medical condition(s) that could adversely affect his/her ability to safely perform the essential job tasks outlined in 5.1.1.

6.1.2 If a candidate presents with a condition that temporarily interferes with his/her ability to safely perform essential job tasks, the replacement medical evaluation shall be postponed until the candidate has recovered from that condition.

Medical Exam Components Provided by the Department's Occupational Healthcare Provider for Firefighters Physicals

1. Health Questionnaire and OSHA Respiratory Questionnaire
2. Drug Screening (pre-employment only)
3. Immunizations
Screening for protection against Hepatitis-A, Hepatitis-B, Hepatitis-C, polio, measles, mumps, rubella, tuberculosis, tetanus/diphtheria, and chicken pox (Varicella) will be performed for all pre-employment exams. These screenings and needed boosters/titers will be conducted and administered as needed. Influenza vaccinations are provided annually.

4. **Hands-On Physical**

Vital Signs

- Blood Pressure
- Pulse
- Respiratory Rate
- Temperature
- Height/Weight

Head, Eyes, Ears, Nose, & Throat

- Vision Screening
- Color Assessment
- Distance Assessment
- Near-Vision Assessment

Audiology Screening

- Hearing Test (500-1000-2000-3000-4000-6000-8000Hz)

Neck

- General Evaluation

Cardiovascular

- Chest X-Ray
- EKG

Pulmonary

- Pulmonary Function Test (Spirometry)

Gastrointestinal

- General Evaluation

Genitourinary

- Men: Testicular & Hernia Evaluation*
- Evaluation & Prostate-Specific Antigen (PSA) tests required for all males
- Women: Pap-Smear, Clinical Breast Exam, Mammography*

Rectal

- Digital Rectal Exam*
- Fecal Occult Blood Testing*

Lymph Nodes

- Evaluation

Neurological

- Mental Status Exam
- Cranial & Peripheral Nerves
- Motor
- Sensory
- Reflexes



Musculoskeletal

- General Range-of-Motion Evaluation

Skin Exam

- Cancer Screening

Body Composition**

5. Laboratory Testing: Urinalysis, Complete Blood Count, Chemistry Metabolic, Lipid Profile (all).
The blood analysis or urinalysis is not intended and will not be used for drug use screening at any time.

- White Blood Cell Count with differential
- Red Blood Cell Count (hematocrit)
- Platelet Count
- Liver Function Test
- Triglycerides
- Glucose
- Blood Urea Nitrogen
- Creatinine
- Sodium
- Potassium
- Carbon Dioxide
- Total Protein
- Albumin
- Calcium
- Cholesterol
- Heavy Metal & Special Exposure Screening

• Follow-Up/Referral

- Annual physical exam results will be forwarded to you and/or your primary care provider (PCP).
- You will complete a HIPAA Release in order to release the results to you and/or your PCP.

• Data Collection

- The HIPAA Release will also authorize the release of some medical component data points for data collection and reporting. The data will not have any identifiers (name, date of birth, Social Security Number, etc.); the data will only be raw data used for research and data reporting.
 - Date of Exam
 - Medical and Family Medical History
 - Alcohol Use
 - Vital Signs
 - Height/Weight
 - Body Composition**
 - Blood Analysis/Urinalysis Results
 - Vision
 - Hearing
 - Spirometry
 - Chest X-Ray
 - EKG
 - Cancer Screening Results
 - Immunizations

**Individual may opt out of this element provided his/her PCP conducts this element as part of an annual exam. The results of the exam must be forwarded to the Occupational Healthcare Provider.*

**Optional