

JP-5 (JET PROPULSION FUEL TYPE 5)

EXPOSURE IN NAVY AVIATION:

SHORT- AND LONG-TERM HEALTH EFFECTS

=====

JP-5 is the primary jet fuel used in U.S. Navy aviation. Sailors and aviation personnel may be exposed through:

- Fueling and defueling aircraft
- Fuel spill cleanup
- Maintenance on engines, fuel cells, pumps, and lines
- Breathing fuel vapors in enclosed hangars, shipboard spaces, or aircraft bays
- Skin contact during fuel handling or leak repair

JP-5 contains kerosene-range hydrocarbons, aromatic hydrocarbons (including trace benzene), additives, and stabilizers.

SHORT-TERM (ACUTE) EFFECTS OF JP-5 EXPOSURE

1. ****Respiratory Irritation****

Inhalation of JP-5 vapors may cause:

- Burning throat or nose
- Coughing
- Headaches
- Dizziness
- Shortness of breath

Symptoms are significantly worse in confined spaces aboard ships or inside aircraft.

2. ****Central Nervous System (CNS) Effects****

Hydrocarbon vapors can depress the CNS.

Symptoms include:

- Lightheadedness
- Fatigue
- Slowed reaction time
- Confusion or impaired judgment
- Nausea

High concentrations may cause temporary loss of coordination.

3. ****Skin and Eye Irritation****

Skin contact with JP-5 can cause:

- Redness
- Dryness or cracking
- Dermatitis
- Chemical burns with prolonged contact

Eye exposure can cause burning and watering.

4. ****Gastrointestinal Effects****

Accidental ingestion or inhaling concentrated vapors may cause:

- Nausea
- Vomiting
- Chemical taste

5. ****Fire and Explosion Hazards****

JP-5 vapors can ignite, creating secondary exposure hazards.

LONG-TERM (CHRONIC) EFFECTS OF JP-5 EXPOSURE

1. ****Chronic Respiratory Problems****

Repeated exposure may lead to:

- Chronic cough

- Airway inflammation
- Asthma-like symptoms
- Reduced lung function

2. **Neurological Effects**

Chronic hydrocarbon exposure may cause:

- Memory problems
- Difficulty concentrating
- Chronic headaches
- Sleep disturbance
- Mood changes (irritability, anxiety)

3. **Skin Disorders**

Long-term contact can result in:

- Persistent dermatitis
- Cracked or thickened skin
- Chemical sensitivity

4. **Hematologic Effects (Blood/Bone Marrow)**

JP-5 may contain trace benzene, a known carcinogen.

Long-term exposure may contribute to:

- Anemia
- Immune dysfunction
- Increased risk of blood cancers

5. **Liver and Kidney Stress**

Chronic exposure can lead to:

- Elevated liver enzymes
- Kidney irritation or reduced filtering ability

6. **Potential Cancer Risks**

Though JP-5 itself is not classified as a strong carcinogen, chronic exposure to:

- Aromatic hydrocarbons (toluene, xylene)
- Trace benzene

may increase risks of:

- Leukemia
- Lymphoma
- Lung cancer

NAVY AVIATION ROLES AT HIGHEST RISK

- Aviation Boatswain's Mates (ABF/ABE)
- Aviation Machinist's Mates (AD)
- Aviation Structural Mechanics (AM)
- Fuel system repair technicians
- Flight deck crew
- Engine repair teams
- Corrosion control and wash rack personnel

Shipboard fueling operations significantly increase vapor exposure.

VA DISABILITY CLAIM WRITEUP EXAMPLE

=====

****Statement in Support of Claim: JP-5 Exposure – Navy Aviation****

I am submitting this statement in support of my claim for service-connected disability due to long-term exposure to JP-5 jet fuel during my service in the United States Navy.

From [YEAR] to [YEAR], I served as an Aviation [RATE/MOS] assigned to the USS [SHIP] and multiple naval air stations. My duties involved frequent handling of JP-5, including fueling and defueling aircraft, cleaning fuel spills, performing maintenance on fuel lines, pumps, and components, and working in enclosed aircraft bays or shipboard spaces where fuel vapors accumulated.

Personal protective equipment such as respirators and chemical-resistant gloves was not always provided or consistently enforced. As a result, I regularly inhaled JP-5 fumes and experienced immediate symptoms including headaches, dizziness, throat irritation, nausea, and fatigue. I often had direct skin contact with JP-5, which caused redness, dryness, and irritation.

Since separating from the Navy, I have continued to experience chronic symptoms consistent with long-term hydrocarbon exposure, including persistent headaches, memory problems, difficulty concentrating, respiratory irritation, chronic skin issues, and fatigue. Medical evaluations have documented [RESPIRATORY CONDITION / DERMATITIS / NEUROLOGICAL SYMPTOMS / BLOODWORK ABNORMALITIES / OTHER], all conditions associated with chronic exposure to jet fuel vapors and petroleum hydrocarbons.

Given the frequency and duration of my exposure to JP-5, the limited protective measures, and the persistence of my symptoms after service, I believe my current health conditions are directly related to my military occupational exposure. I respectfully request that the VA recognize these disabilities as service-connected.

Signed,

[Veteran Name]

[Date]