

## PULMONARY WAIVERS

Revised March 2003

### ASTHMA (ICD9 493.9)

**AEROMEDICAL CONCERNS:** Asthma symptoms can rapidly progress from minimal to totally disabling at any time. Exacerbations and asthmatic symptoms may pose a threat to aviation safety by interfering with cockpit tasks and duties as well as general mission completion.

### **WAIVERS:**

#### 1. Initial (Class 1A/1W):

Asthma, including reactive airway disease, exercise induced bronchospasm, or asthmatic bronchitis reliably diagnosed at any age is disqualifying. Exceptions to policy are possible with submission of required information as listed below.

#### 2. Initial (Class 2, 3, 4) and Rated Aviators (Class 2):

Waivers are possible for mild intermittent and mild persistent asthma if individual meets the following criteria:

- Meet criteria for mild intermittent or mild persistent asthma (see below).
- Has demonstrated they can perform all military training and duties (including the APFT) without activity limitations.
- Has no past history of sudden severe exacerbations, severe persistent or moderate persistent asthma.
- No history of any hospitalizations or intubations for exacerbations.
- No history of recurrent oral steroid use for exacerbations.

### **INFORMATION REQUIRED:**

1. Statements from the aeromedical provider demonstrating aircrew member meets the criteria set forth above.
2. Internal Medicine and/or pulmonology consultation to include complete pulmonary function testing (PFT).
3. Baseline, post bronchodilator, and methacholine/provocative testing may be required.
4. Chest X-ray (PA/LAT) results where appropriate.
5. Allergy/immunology work-up may be required.

**FOLLOW-UP:** Follow-up with aviation health-care provider is required annually with notes on degree of symptom control, history of any exacerbations, current medications, *in addition* to annual spirometry testing.

**TREATMENT:** For aircrew members who meet the above criteria, short-acting beta-agonist rescue inhalers, low-dose inhaled corticosteroids, and leukotriene modifiers are authorized in addition to cromolyn sodium and nedocromil sodium inhalers. Smoking cessation, if applicable, is also an essential component of the treatment regiment to prevent worsening of symptoms and exacerbations. Applicants for waiver who continue to smoke should be counseled on cessation and

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offered assistance. (See Smoking Cessation APL). Immunotherapy is authorized where indicated and patient will be considered for waiver 30 days post-completion of therapy provided relief of symptoms and above criteria are met.

**DISCUSSION:** Reliable diagnostic criteria for asthma should consist of any of the following:

- Substantial history of cough, wheeze, and/or dyspnea that persists or recurs over a prolonged period of time, generally more than 6 months.
- If the diagnosis is in doubt, a test for reversible airflow obstruction (greater than a 15 percent increase in FEV1 following administration of an inhaled bronchodilator OR airway hyperactivity (as demonstrated by exaggerated decrease in airflow induced by bronchoprovocation challenge such as methacholine inhalation or a demonstration of exercise induced bronchospasm).

Chronic asthma that results in a P3 or P4 profile and MEB/PEB as outlined in AR 40-501 paragraph 3-27 a (2) will not be considered for waiver. The table below provides guidance on definition and treatment with respect to mild persistent and mild intermittent asthma as well as general follow-up guidelines for the aeromedical healthcare provider.

*Adapted from: National Asthma Education and Prevention Program Expert Panel Report 2: Guidelines for the Diagnosis and Management of Asthma*

<b>Class Severity</b>	<b>Day/Night Symptoms</b>	<b>PEF or FEV1 PEF Variability</b>	<b>Daily Medications *</b>
<b>STEP 2 Mild Persistent</b>	<u>&gt;2/week but &lt;1x/day</u> >2 nights/month	<u>Greater than or equal to 80%</u> 20-30%	<b>Preferred Treatment:</b>  Low-dose inhaled corticosteroids  Alternative Treatment (listed alphabetically): cromolyn, leukotriene modifier, nedocromil
<b>STEP 1 Mild Intermittent</b>	<u>Less than or equal to 2 days/week</u> Less than or equal to 2 nights/month	<u>Greater than or equal to 80%</u> < 20%	No daily medication needed. Severe exacerbations may occur, separated by long periods of normal lung function and no symptoms. A course of systemic corticosteroids is recommended.

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\* Albuterol as rescue inhaler only for both classifications of patients.

For mild intermittent asthmatics, the recommended follow-up is every 6-12 months to re-assess symptoms and appropriate classification. For those with mild persistent asthma, the recommended follow-up is every 6 months.

Asthma currently affects 5-10 percent of the U.S. population. Asthma is a chronic inflammatory disorder of the airways in which many cells and cellular elements play a role, in particular, mast cells, eosinophils, T lymphocytes, macrophages, neutrophils, and epithelial cells. In susceptible individuals this inflammation causes recurrent episodes of wheezing, breathlessness, chest tightness, and coughing, particularly at night or in the early morning. These episodes are usually associated with widespread but variable airflow obstruction that is often reversible either spontaneously or with treatment. The inflammation also causes an associated increase in the existing bronchial hyperresponsiveness to a variety of stimuli and pharmacologic therapy is directed at suppressing airway inflammation. Asthma may have an allergic basis, be it associated with allergic rhinitis, occur secondary to gastroesophageal reflux, or occur subsequent to upper respiratory infection. Attacks can be precipitated or exacerbated by breathing dry, cold air, exercise, or exposure to a known allergen.

## REFERENCES:

<http://www.nhlbi.nih.gov/health/prof/lung/asthma/practgde.htm>, Practical Guide for the Diagnosis and Management of Asthma

<http://www.nhlbi.nih.gov/guidelines/asthma/index.htm>, Guidelines for the Diagnosis and Management of Asthma—Update on Selected Topics 2002