

## **FIGURE 3–21. EVALUATION AND MANAGEMENT OF WORK-AGGRAVATED ASTHMA AND OCCUPATIONAL ASTHMA**

### **Evaluation**

#### **Potential for workplace-related symptoms:**

- Recognized sensitizers (e.g., isocyanates, plant or animal products).
- Irritants\* or physical stimuli (e.g., cold/heat, dust, humidity).
- Coworkers may have similar symptoms.

#### **Patterns of symptoms (in relation to work exposures):**

- Improvement occurs during vacations or days off (may take a week or more).
- Symptoms may be immediate (<1 hour), delayed (most commonly, 2–8 hours after exposure), or nocturnal.
- Initial symptoms may occur after high-level exposure (e.g., spill).

#### **Documentation of work-relatedness of airflow limitation:**

- Serial charting for 2–3 weeks (2 weeks at work and up to 1 week off work, as needed to identify or exclude work-related changes in PEF):
  - Record when symptoms and exposures occur.
  - Record when a bronchodilator is used.
  - Measure and record peak flow (or FEV<sub>1</sub>) every 2 hours while awake.
- Immunologic tests.
- Referral for further confirmatory evaluation (e.g., bronchial challenges).

### **Management**

#### **Work-aggravated asthma:**

- Work with onsite health care providers or managers/supervisors.
- Discuss avoidance, ventilation, respiratory protection, tobacco smoke-free environment.

#### **Occupationally induced asthma:**

- Recommend complete cessation of exposure to initiating agent.

\*Material Safety Data Sheets may be helpful for identifying respiratory irritants, but many sensitizers are not listed.

Key: FEV<sub>1</sub>, forced expiratory volume in 1 second; PEF, peak expiratory flow