### Decision Logic for Work-Related Asthma

#### Case Identification

Case of suspected work-related asthma?

- Yes → Healthcare professional’s diagnosis consistent with asthma?
  - Yes → An association between symptoms and work?
    - Yes → Work-Related Asthma (WRA)
    - No → Unlikely work-related
  - No → Unlikely asthma
- No → Unlikely asthma

#### WRA Case Classification

- Meets C1? (see Criteria List)
  - Yes → Work-Aggravated Asthma (WAA)
  - No → WRA, insufficient data to classify
  - Unknown
  - New-Onset Work-Related Asthma (NOA)
  - Meets C2 (see Criteria List)?
    - Yes → Reactive Airways Dysfunction Syndrome (RADS)
    - No → Occupational Asthma

#### Occupational Asthma Case Subclassification

- Meets C3 (see Criteria List)?
  - Yes → Known Asthma Inducer
  - No → Unknown Asthma Inducer

### Criteria List

C1) Increased asthma symptoms or increased use of asthma medication (upon entering an occupational exposure setting) experienced by a person with a preexisting asthma who was symptomatic or treated with asthma medication within the 2 years prior to entering that new occupational setting.

C2) New asthma symptoms that develop within 24 hours after a one-time high-level inhalation exposure (at work) to an irritant gas, fume, smoke, or vapor and that persist for at least 3 months.

C3) Workplace exposure to an agent previously associated with occupational asthma using Association of Occupational and Environmental Clinics asthmagen criteria.

C4) Work-related changes in serially measured forced expiratory volume in 1 second (FEV1) or peak expiratory flow rate (PEFR).

C5) Work-related changes in bronchial responsiveness as measured by serial nonspecific inhalation challenge testing.

C6) Positive response to specific inhalation challenge testing with an agent to which the patient has been exposed at work.