

**Title 8: California Code of Regulations**  
**Division 1: Department of Industrial Relations**  
**Chapter 1: Industrial Medical Council**  
**Article 4: Evaluation Methodology**  
**Section 47: Method of Evaluation of Immunologic Disability**

Adopted March 17, 1994

Laboratory testing of immunologic function is appropriate and necessary in the evaluation of industrial injuries but only in selected cases.

Immunologic function testing falls into four general categories:

- I. Allergy to a specific chemical agent
- II. Allergy to common antigens from the general and home environment (e.g., pollens)
- III. Malfunction of the immune system unrelated to infection
- IV. Specific infection

**Category I: Allergy To A Specific Chemical Agent**

Testing shall be done only when:

- A. The worker has been exposed to a specific chemical at work known to cause hypersensitivity.
- B. The worker has symptoms or physical findings on examination that can be due to allergy to a chemical agent.
- C. The specific suspected chemical agent of interest has been identified.

Testing shall not be done for chemical agents to which the worker has not been exposed.

The purpose of Category I is to confirm that the worker is allergic and reactive to a specific chemical agent. The presence of a laboratory test showing reactivity does not in itself indicate physical disability unless there also are subjective symptoms and/or objective findings of physical impairment which are consistent with such reactivity. Many people have positive reactivity tests but do not have clinical disease. Testing methods must be for the specific chemical agent. They may be blood tests for antibodies, skin tests or special tests such as lymphocyte reactivity to beryllium.

## **Category II: Tendency To React To Common Allergens**

This testing is of very limited use: It is allowable only when the clinical findings (e.g., sneezing, nasal obstruction or wheezing) could be due to either workplace agent or non-industrial exposure. Testing may be of the blood (IgE, RAST) or of the skin (patch, scratch or intradermal).

## **Category III: Testing Of Function Of The Immune System**

In unusual circumstances (e.g., occupational exposures to ionizing radiation or chemotherapeutic agents), direct clinically significant damage to the immune system may occur and be relevant to the assessment of occupationally related disability. Many chemical agents other than chemotherapeutic drugs have been shown to produce subtle effects on the immune system in research studies. However, such subtle effects do not cause work-related disability and cannot be the basis for laboratory testing.

In the unusual circumstance in which the need for immune testing occurs, such testing shall involve some or all the following:

- A. Complete blood count
- B. Total serum immunoglobulin level and immunoglobulin electrophoresis
- C. Total lymphocyte count and counting of T and B lymphocytes, including subsets.

Further testing of the immune system must be based on a strong clinical indication and must be supported by an explanation by the physician as to the need and purpose of the testing (which may be diagnostic or prognostic in nature but not for research purposes).

Under circumstances such as a severely emotionally stressful event or the taking of certain medications for an industrial illness or injury, an autoimmune disorder may be precipitated or aggravated. When symptoms and/or physical findings suggestive of this occur, serological testing for autoimmune disorders is appropriate, but only when needed to confirm the diagnosis.

## **Category IV: Specific Infections**

Serologic and other immune system testing are allowable only when the physician-obtained history, physical examination, routine laboratory test results and/or medical records confirm or cause the physician to suspect certain infections that may be occupationally-related (e.g., viral hepatitis, valley fever and HIV infection).

Testing may be specific for the infectious agent or may be nonspecific:

A. Specific tests:

1. Antigen and antibody tests that currently are available for the various types of viral hepatitis (A, B, C and delta).
2. Complement fixation titer for valley fever (coccidioidomycosis) to rule in or out active disseminated disease.
3. Elisa testing for an HIV infection. If positive, the results shall be confirmed with a Western Blot test.

B. Nonspecific tests:

1. White blood cell and differential count
2. Total lymphocyte count and counting of T and B lymphocytes, including subsets. Further testing of the immune system shall be based on strong clinical indications and shall be supported by an explanation by the physician of the need and purpose of the testing.

### **Summary**

In the four selected categorical situations, immunological laboratory testing is appropriate only as described above. Such testing shall be performed in workers' compensation cases only if an abnormality would affect the determination of compensability or clinical management. These conditions include determination of disability status (temporary partial disability, temporary total disability, permanent partial disability and permanent total disability), specific work restrictions, causation of disability, apportionment, future medical treatment and the need for vocational rehabilitation.