

Fact Sheet on Cholinesterase Testing for Monitoring Workers in the California Medical Supervision Program

NEW! Medical supervisor physicians should register with OEHHA in order to contract with an employer:
<https://oehha.ca.gov/pesticides/general-info/medical-supervisor-registration>

1. **SCREEN THE WORKER** on the initial visit to be sure he/she can work with cholinesterase inhibiting pesticides.
2. **USE A CERTIFIED LAB** and always put blood samples on ice or store at 4°C immediately after drawing. California Department of Public Health certified labs are listed at:
<https://www.cdph.ca.gov/Programs/CCDCPHP/DEODC/EHLB/Pages/CDPH-Approved-Cholinesterase-Laboratories.aspx>
3. **NEW! INDICATE THE PURPOSE OF THE TEST AND NAME OF THE PHYSICIAN** on the laboratory test requisition form if ordering a cholinesterase activity test for this program and use one of the following terms:

Baseline, Follow-up or Recovery

 Each test consists of measuring both RBC AND plasma cholinesterase (ChE) and **NOT** one or the other.
4. **ESTABLISH BASELINE.** ChE activity levels **before** follow-up testing after a 30 days exposure-free period or after the longest practicable exposure-free period possible if less than 30-days. One test is permissible although an average of two tests 3-14 days apart is recommended. **Do not use lab normal values for baselines.** Verify baseline at least every two years.
5. **ORDER FOLLOW-UP TESTS** as required. Test once within 3 days after each of the first three 30-day qualifying period. After the first three 30-day qualifying periods, testing intervals must be every other 30-day qualifying period (not necessarily continuous 60 days) unless otherwise specified in writing by the medical supervisor.
6. **COMPARE FOLLOW-UP RESULTS TO THE BASELINE** to evaluate for inhibition of ChE and make recommendations, including:

Percent of Baseline	RBC ChE	Plasma ChE
< 80%	Prompt retesting of worker and investigation of work practices by employer	
≤ 70%	Immediate removal of worker from further exposure	-
≤ 60%	-	Immediate removal of worker from further exposure

- **NEW! NOTIFY WORKER AND EMPLOYER OF RESULTS.** Ensure that both the tested worker and his/her employer receive a copy of the ChE test results, and any recommendations from the medical supervisor based on those results within 14 days of the medical supervisor receiving the results.
- 7. **NEW! REPORT PESTICIDE EXPOSURE.** Report any worker with ChE depression indicating pesticide exposure to the Local Health Officer within 24 hours.
- 8. **ALLOW RETURN TO WORK (RECOVERY).** Test frequently to determine when a worker removed from further exposure to these pesticides can resume working with them, i.e., when ChE activity levels return to ≥ 80 percent of both RBC and plasma baseline values. Notify the worker and employer when the worker can return to work.