

## Medical Surveillance - Cholinesterase

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The Cholinesterase Surveillance Program is a mandatory employee health monitoring program. The objective of this program is to ensure that working with cholinesterase-inhibiting compounds such as organophosphate and carbamate pesticides is not adversely affecting the health of workers, by measuring the cholinesterase levels in blood.

All employees whose responsibilities include working with organophosphate or carbamate pesticides are required to have their cholinesterase level determined before assuming their duties. This requirement includes both new employees and employees transferred from other duties which did not previously include working with pesticides. Supervisors are requested to forward a list of names of employees who work with organophosphate or carbamate pesticides to Occupational Health & Wellness each year pre-season.

Cholinesterase is measured on red blood cell (RBC). The baseline blood samples should be taken annually, that is pre-season (e.g. at a time when the worker has not been exposed to organophosphate or carbamate pesticides preferably for at least 30 days) and post-seasonal, after the season is completed. OHW will issue requisitions clearly marked as baseline and post seasonal.

The results are to be forwarded to Occupational Health & Wellness at the University of Guelph, Alexander Hall Bldg. 31, Rm. 179, as soon as they are available, in order that the Occupational Health & Wellness Nurse can review them. If it is determined that further follow up is required, then Occupational Health & Wellness will contact the respective employee who may have significant changes or abnormalities in their results.

#### POST-EXPOSURE PROTOCOL

If a worker reports that s/he was exposed to organophosphate or carbamate pesticide during work, an incident report would need to be completed in accordance with the University's incident reporting process. It would be important to have a blood sample drawn right away, with both serum cholinesterase and RBC cholinesterase testing. The OHW nurse as well as the Occupational Health Physician, are available for consultation on personnel that have had a suspected exposure and/or incident to organophosphate or carbamate pesticides.

For further information and a comprehensive outline of the program please refer to the Medical Surveillance-Cholinesterase module. Occupational Health & Wellness can also be contacted at x52647 or [ohw@uoguelph.ca](mailto:ohw@uoguelph.ca) [1].

[Cholinesterase Module](#) [2]

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#### Links

[1] <mailto:ohw@uoguelph.ca> [2]

<https://www.uoguelph.ca/hr/system/files/Cholinesterase%20Surveillance%20Program-%20Feb%202024.pdf>