

Lentiviral Vector and Retroviral Vector Postexposure Treatment: After-Hours Care

Attention: LHSC, University Hospital, Emergency Department

- This Western University employee has been exposed to a Lentiviral Vector (LVV) or Retroviral Vector (RVV) in the course of their work
- The employee will provide a detailed history of the incident
- Please provide the employee with an assessment, blood testing, and treatment, as deemed appropriate, as soon as possible and within 72 hours of the exposure
- Postexposure prophylaxis (PEP) is recommended in the following scenarios:
 - Direct parenteral inoculation (needlestick or sharps injury)
 - Contact with mucous membranes or non-intact skin
 - Inhalation of droplets from an aerosol-generating procedure outside of a primary containment unit
- The recommended treatment* for LVV and RVV exposure is listed below:

For $replication-deficient\ vectors$: tenofovir disoproxil fumarate 300mg PO daily x 7 days PLUS dolutegravir 50mg PO daily x 7 days

For replication-competent vectors: tenofovir disoproxil fumarate 300mg PO daily x 28 days PLUS dolutegravir 50mg PO daily x 28 days

- Please have the employee consent to have their blood test results sent to Dr. Sonya Malone, Workplace Health Physician, Western University, Fax #519-661-2016.
- The employee is responsible for following up at Western's Workplace Health Office on the following business day

Thank you for your prompt attention to this occupational exposure incident.

Dr. Sonya Malone, MD, CCFP, ACBOM Workplace Health Physician, Western University

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*Fujimoto GR, Wooley DP, Byers KB, Yang OO, Behrman AJ, Winters TH, Hudson TW. Update on Managing the Risks of Exposure to Lentiviral and Retroviral Vectors. J Occup Environ Med. 2024 Oct 1;66(10):818-825. doi: 10.1097/JOM.0000000000003166. Epub 2024 Jun 11. PMID: 38913827.

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