



## Mechanism and Effects of Pre-Exposure Prophylaxis (PrEP) Drugs Used for Prevention of HIV

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**ABSTRACT:** Human immunodeficiency virus (HIV) remains among the most infectious as well as deadly disease. With approximately 36.9 million people worldwide living with HIV/AIDS in 2017, it is estimated that of these 1.8 million were adolescents (<17 years). Pre-exposure prophylaxis (PrEP) is an HIV prevention strategy that uses antiretroviral drugs to prevent HIV –negative people from HIV acquisition .It is reported to reduces more than 90% if used consistently. Daily or intermittent dosing of antiretroviral medication over an extended period of time is required for prevention of one or more high-risk exposures to HIV. Ant-HIV drugs mechanisms include, prevention of virus replication in the body, protease inhibition, integrase inhibition and fusion/entry inhibition. Noticeable complications reported include PrEP associated resistance. Short term effect includes (abdominal cramping, fatigue, vomiting, and dizziness) long terms effects include(loss of bone density and kidney toxicity,) are linked with tenofovir disoproxil fumerate (TDF) and emtricitabine (FTC) PrEP drugs. © 2019 iGlobal Research and Publishing Foundation. All rights reserved.

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