

**Strategies proven to be effective** These strategies have been proven effective in preventing HIV transmission. They can be used alone, but since none of them are 100% perfect, it's often a good idea to combine more than one together.

# **TAKING PEP** (POST-EXPOSURE PROPHYLAXIS)



Starting antiretroviral medication (anti-HIV pills) by an HIV-negative person a maximum of 72 hours after possible exposure to HIV, to reduce the risk that an infection will take hold

#### **Description**

- Post-exposure prophylaxis (PEP) consists of a combination of anti-HIV drugs which an HIV-negative person can take to reduce the possibility of actually developing an infection after potentially being exposed to HIV.<sup>1</sup>
- Taken orally, the medication used to prevent an infection must be started no more than 72 hours after possible exposure to HIV and taken every day for 4 full weeks.<sup>1,2</sup>
- PEP does not protect against the transmission of other STIs.

#### **Effectiveness**

- In studies on occupational exposure, mother-to-child transmission and transmission among animals, PEP has been proven effective but does not 100% protection.<sup>2</sup>
- We still know too little about the effectiveness of PEP for exposure during sex. Only a few studies have been done and these show a low rate of transmission (between 0% and 1%).<sup>3-6</sup>
- In a study specifically among men who have sex with men who engaged in risky sexual behaviour, 1.5% of participants who used PEP became infected as opposed to 11.6% who did not use PEP.<sup>7</sup>
- Several factors influence the treatment's effectiveness, such as
  - o how much time passes before treatment is started; the earlier it is begun, the more effective PEP is
  - $\circ$  treatment adherence; the more closely you follow the prescribed dosage, the more effective it is
  - $\circ\;\;$  type of virus; if the virus is resistant to one of the medications, the treatment may be less effective,
  - exposure to other risky sexual contact during the course of the treatment.<sup>2</sup>
- You must be tested at the time you take PEP, and again three months after the treatment has ended.<sup>8</sup>
- The Quebec ministry of health and social services (MSSS) recommends treatment be started as soon as possible, ideally within 2 hours of exposure.<sup>9</sup>

#### Accessibility

- PEP is offered in some emergency rooms and urgent care clinics, as well as clinics specializing in sexual health.
- The healthcare provider decides whether or not to prescribe PEP and the decision is handled case by case using an assessment of the risk of transmission based on several factors including<sup>2-9</sup>
  - o the risk that the sexual partner is HIV-positive and viral load
  - the amount of time that has passed since exposure
  - the risk associated with the type of exposure.
- The medication costs between \$1000 and \$1500 for one month (depending on which medications are prescribed), but the treatment is partly covered by drug insurance plans.<sup>10</sup> For people between 18 and 64 who have public prescription drug insurance (RAMQ), the maximum cost is \$87.75 for one course of treatment.<sup>11</sup> The costs vary for people with private insurance, generally between 20% and 25% of the monthly cost.



# Acceptability

- In the *Mobilise!* survey among men who have sex with men in Montreal, 72% of respondents knew about PEP as a risk reduction strategy. Of these, 82% said they were very confident in its effectiveness for reducing the risk of HIV infection.<sup>12</sup>
- Up to 97% of participants in various studies have shown an interest in using PEP if needed.<sup>13,14</sup>
- In a study that offered free PEP, 43% of participants chose not to take the medication despite having reported at least one risky practice, their main reasons being
  - o the fact that their sexual partner was a regular partner
  - $\circ~$  that they did not consider the practice risky enough to require the use of the medication
  - they had concerns about the treatment's side effects<sup>7</sup>
- In a cross-Canada study, only 42% of men considered PEP to be effective and 58% felt it wasn't.<sup>15</sup>
- According to an analysis of several studies, 67.2% of men who decided to take PEP followed the treatment in full.<sup>16</sup>
- Advantages of PEP:
  - It is highly effective in protecting against HIV.<sup>17</sup>
  - It offers an emergency alternative if the prevention strategy you were planning to use fails or is forgotten.<sup>17</sup>
  - Brings a sense of relief and reduces the stress that can arise after taking a risk.<sup>17</sup>
- Disadvantages of PEP:
  - There are side effects<sup>17</sup>, the type and severity of which can vary from person to person and that can make it hard to take the medication correctly or to finish the treatment in full.<sup>1</sup> This sometimes causes patients to stop treatment or prevents them from following medical instructions.<sup>2</sup>
  - Must be started within a short time span.<sup>17</sup>
  - Effectiveness depends on being diligent in completing the full course of medication.<sup>17</sup>
  - Does not protect against other STIs.<sup>10</sup>
  - $\circ$  Is only available in specialized clinics and in certain healthcare facilities (which may be difficult to access if you live outside of Montreal).<sup>17</sup>
  - $\circ$  There is a risk of developing drug resistance if infected with HIV while taking PEP.<sup>1</sup>
  - Raises concerns that the availability of PEP may lead to a false sense of security and an increase in risky practices.<sup>1,17</sup> These concerns have not been scientifically substantiated.<sup>14,18</sup>
- Obstacles to PEP:
  - Having a negative conception of risky behaviour (e.g. shame, disappointment, feelings of failure).<sup>19</sup>
  - Having an inaccurate idea of the risks associated with your practices or choice of partners.<sup>7,17,19,20</sup>
  - Facing practical barriers (e.g. clinic hours, service providers' lack of knowledge) that make it hard to get quick access to PEP, a key requirement for the treatment to be effective.<sup>17,21</sup>
  - Feeling that you need to disclose sensitive information to service providers in order to access it (e.g. sexual orientation, sexual practices, number of partners).
  - Being unsure that you can cover the cost if you don't have insurance or if your insurance does not cover the full cost.<sup>17</sup>
  - Not knowing that it exists or not knowing where to access it.<sup>17</sup>

### Cost effectiveness

• PEP is considered to be cost effective if implemented as an additional method complementary to other HIV prevention efforts and if offered to individuals who engage in high risk practices.<sup>22-26</sup>

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