

**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 ANTIRETROVIRAL TREATMENT** (IF YOU ARE HIV-POSITIVE)

Taking antiretroviral treatment (anti-HIV pills) regularly and correctly as soon as possible after an HIV diagnosis so as to reduce viral load

## **Description**

- For people living with HIV, antiretroviral therapy (ART) can reduce viral load and can greatly reduce the risk of developing long-term complications from the infection. In addition, taking ART significantly reduces the risk of transmitting the virus.<sup>1</sup>
- Treatment of HIV for the purposes of prevention (often called "treatment as prevention" or TAsP) is a public health strategy aimed at encouraging patients infected with HIV to begin ART as soon as possible after a diagnosis.<sup>2</sup>
- The link between testing and treatment ("test and treat") is another concept that is often talk about and refers to the combination of HIV testing with the use of treatment as a prevention tool. The central idea of this strategy is that members of groups affected by HIV should get tested at least every year and those who are diagnosed should be referred to the healthcare system to begin treatment as soon as possible.<sup>3-5</sup>
- By increasing the number of HIV-positive people who know their status and who are being treated, the amount of virus in circulation in a community (community viral load) is goes down, making it possible to reduce the number of new infections in the community.<sup>6,7</sup>
- With ART, it is possible to control an HIV infection and thereby improve the health of HIV-positive people. People still need to have regular medical follow up to maintain access to treatment, help with treatment adherence, and monitor for side effects.<sup>7,8</sup>
- Taking ART has no effect with respect to preventing the transmission of other STIs.

### **Effectiveness**

- The effectiveness of treatment as a prevention tool for men who have sex with men is not yet clear:
  - Some claim that despite better access to treatment and a lowering of community viral load, the number of new infections remains the same or continues to rise.<sup>7</sup>
  - However, the number of new infections would be higher if access to treatment were less widespread in high-income countries.<sup>7</sup>
  - Between 2004 and 2011 in San Francisco, a reduction in the number of new cases among men who have sex with men was observed after treatment was made more available and community viral load was reduced.<sup>9</sup>

### Accessibility

- After getting a positive HIV test result, a recently diagnosed individual will be referred to a doctor for medical follow up. Taking the patient's health and other needs into consideration, the doctor and patient will decide together which treatment to take and when to begin.
- HIV medication is covered by health insurance plans based on the same rules as other prescription drugs.

### **Acceptability**

• In the *Mobilise!* survey among men who have sex with men in Montreal, just over half (57%) of respondents knew about treatment for the purposes of prevention as a risk reduction strategy.<sup>10</sup>



- In a study among individuals recently diagnosed with HIV, 64% of participants went on treatment in the first year after their diagnosis.<sup>11</sup>
- Advantages of treatment as a prevention tool:
  - Improves the health of HIV-positive people.<sup>12,13</sup>
  - Reduces an HIV-positive person's viral load.<sup>12,13</sup>
  - Protects sexual partners and the community against new infections.<sup>12,13</sup>
- Disadvantages of treatment as a prevention tool:
  - The side effects of ART can cause difficulties.<sup>13</sup>
  - You may have to pay part of the cost of the medication.<sup>13</sup>
  - $\circ$  You have to adhere to your treatment (take all drugs at the time as prescribed) for it to be effective.
  - Does not protect against other STIs.<sup>14</sup>
  - Requires regular medical follow up.
- Obstacles to treatment as a prevention tool:
  - $\circ~$  Lack of HIV-related knowledge (e.g. that an undetectable viral load reduces the risk of transmission).  $^{14}$
  - HIV-positive individuals not seeing this as a primary prevention strategy and preferring to use other strategies such as abstinence, condoms, serosorting, or adopting low-risk practices.<sup>14</sup>
  - Being afraid of developing drug resistance.<sup>14</sup>
  - Implementing on a community level is difficult since a large number of people don't know they are infected.<sup>7</sup>
  - Encountering difficulties in accessing a medical follow up that complicate access to treatment.<sup>7</sup>
  - Being afraid that taking medication will lead to your HIV+ status being revealed.<sup>13</sup>
  - Being concerned about experiencing stigma and discrimination against HIV-positive people from pharmacists, partners, friends, co-workers, or members of your family.<sup>13</sup>

### Cost effectiveness

• Using mathematical projections based on data from the epidemic among heterosexual populations in Africa, a study has shown that reducing the number of new infections would make this strategy cost effective.<sup>15</sup>

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