

HIV Chatbot Dataset

Q1: What does HIV stand for?

Answer: HIV stands for human immunodeficiency virus.

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-and-aids-basics>

Q2: What is the difference between HIV and AIDS?

Answer: HIV is the virus; AIDS (acquired immunodeficiency syndrome) is the most advanced stage of HIV infection characterized by severe immune damage and certain defining illnesses.

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-and-aids-basics>

Q3: How does HIV attack the body?

Answer: HIV targets CD4 (T-helper) cells, using them to replicate, which gradually weakens the immune system and increases susceptibility to opportunistic infections.

Source: <https://www.cdc.gov/hiv/index.html>

Q4: Can someone look healthy and still have HIV?

Answer: Yes. Many people are asymptomatic for years after infection but can still transmit the virus.

Source: <https://www.cdc.gov/hiv/index.html>

Q5: Where did HIV come from?

Answer: Most evidence shows HIV-1 originated from a chimpanzee simian immunodeficiency virus (SIV) that crossed into humans (zoonosis) in Central Africa in the early 20th century.

Source: <https://pmc.ncbi.nlm.nih.gov/articles/PMC3234451/>

Q6: Is HIV the same as AIDS?

Answer: No. HIV is the virus; AIDS is the late stage of HIV disease defined by very low CD4 count or certain opportunistic illnesses.

Source: <https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/what-are-hiv-and-aids>

Q7: How many people live with HIV worldwide?

Answer: In 2024, an estimated 40.8 million people were living with HIV globally.

Source: <https://www.unaids.org/en/resources/fact-sheet>

Q8: How is HIV transmitted?

Answer: HIV is transmitted through specific activities that allow certain body fluids from a person with HIV to enter another person bloodstream most commonly sex without protection or sharing needles; from mother to child can occur during pregnancy, delivery, or breastfeeding without effective treatment.

Source: <https://www.cdc.gov/hiv/index.html>

Q9: Which bodily fluids can carry HIV?

Answer: Blood, semen (including pre-seminal fluid), rectal fluids, vaginal fluids, and breast milk carry HIV. Saliva, sweat, and tears do not transmit HIV unless visibly contaminated with blood.

Source: <https://www.cdc.gov/hiv/index.html>

Q10: Can HIV be transmitted through saliva?

Answer: Transmission through saliva alone has not been shown; saliva is not a route of transmission for HIV.

Source: <https://www.cdc.gov/hiv/index.html>

Q11: Can you get HIV from sharing food?

Answer: No. HIV is not spread by casual contact such as sharing food, utensils, or dishes.

Source: <https://www.cdc.gov/hiv/index.html>

Q12: Is it possible to get HIV from tattoos or piercings?

Answer: Tattooing and piercing can theoretically transmit HIV if instruments are not sterile and blood is exchanged; use professional, sterile services to minimize risk.

Source: <https://www.cdc.gov/hiv/index.html>

Q13: If both partners are HIV positive, do they still need condoms?

Answer: Condoms are recommended to prevent other STIs and to reduce HIV transmission if either partner is not virally suppressed.

Source: <https://www.cdc.gov/hiv/index.html>

Q14: What are effective methods to prevent HIV?

Answer: Consistent condom use, not sharing needles, taking PrEP when at risk, and ensuring people with HIV are on ART and virally suppressed (U=U).

Source: <https://www.cdc.gov/hiv/index.html>

Q15: Who should take PrEP?

Answer: People at substantial risk of HIV such as those with sexual or injection-drug exposure risk should be offered PrEP after individualized assessment.

Source: <https://hivinfo.nih.gov/>

Q16: Does male circumcision reduce HIV risk?

Answer: Yes. Voluntary medical male circumcision reduces a heterosexual man risk of acquiring HIV by about 60% when combined with other prevention methods.

Source: <https://www.unaids.org/>

Q17: Is there an HIV vaccine?

Answer: No licensed HIV vaccine exists yet as of August 2025, though research continues.

Source: <https://hivinfo.nih.gov/>

Q18: What are early symptoms of HIV?

Answer: Some people develop a short, flu-like illness (fever, sore throat, rash, swollen nodes) 2-4 weeks after exposure; others have no symptoms.

Source: <https://www.cdc.gov/hiv/index.html>

Q19: What is acute HIV infection?

Answer: The earliest stage after infection when the virus multiplies rapidly and viral load is very high; people are highly infectious and may have flu-like symptoms.

Source: <https://www.cdc.gov/hiv/index.html>

Q20: What are signs of AIDS?

Answer: AIDS is defined by very low CD4 count or certain opportunistic illnesses such as Pneumocystis pneumonia, toxoplasmosis, certain cancers, and severe weight loss.

Source: <https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/what-are-hiv-and-aids>

Q21: What opportunistic infections are common with AIDS?

Answer: Examples include Pneumocystis jirovecii pneumonia, tuberculosis, toxoplasmosis, cryptococcal meningitis, cytomegalovirus disease, and certain cancers (e.g., Kaposi sarcoma).

Source: <https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/what-are-hiv-and-aids>

Q22: Can HIV symptoms be absent?

Answer: Yes. After the acute phase, many people have few or no symptoms for years without treatment.

Source: <https://www.cdc.gov/hiv/index.html>

Q23: How long does it take for symptoms to appear?

Answer: Acute symptoms, if they occur, typically begin 2-4 weeks after exposure.

Source: <https://www.cdc.gov/hiv/index.html>

Q24: What is seroconversion illness?

Answer: The flu-like illness some people experience during acute HIV infection as antibodies begin to develop.

Source: <https://www.cdc.gov/hiv/index.html>

Q25: When should I get tested for HIV?

Answer: Test at least once in your lifetime, and more often if you have ongoing risk. Test immediately after a possible exposure and again after the window period.

Source: <https://www.cdc.gov/hiv/testing/index.html>

Q26: What types of HIV tests are available?

Answer: Antibody tests, antigen/antibody (4th generation) tests, and nucleic acid tests (NAT).

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-testing>

Q27: What is the window period?

Answer: The time between HIV exposure and when a test can reliably detect infection. Typical windows: NAT 10-33 days; lab antigen/antibody 18-45 days; rapid antigen/antibody 18-90 days; antibody tests 23-90 days.

Source: <https://www.cdc.gov/hiv/testing/index.html>

Q28: How long do results take?

Answer: Rapid tests can give results in 20-30 minutes; lab-based tests typically take several days.

Source: <https://www.cdc.gov/hiv/testing/index.html>

Q29: Is HIV testing confidential?

Answer: Yes. Testing is confidential; in the Philippines, RA 11166 also guarantees confidentiality of HIV-related information.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q30: Can I test for HIV at home?

Answer: Yes. FDA-authorized self-tests are available; most are antibody tests with longer window periods. Follow instructions and confirm positives at a clinic.

Source: <https://www.cdc.gov/stophivtogether/hiv-testing/self-testing.html>

Q31: Are HIV tests free in the Philippines?

Answer: Many governments Social Hygiene Clinics and DOH-accredited sites offer free or low-cost HIV testing and counseling.

Source: https://pnac.doh.gov.ph/wp-content/uploads/2023/08/IRR_of_RA_11166.pdf

Q32: How often should key populations test?

Answer: WHO recommends testing at least annually for people at ongoing risk; many programs offer testing every 3-6 months for key populations.

Source: <https://www.cdc.gov/hiv/testing/index.html>

Q33: What is antiretroviral therapy (ART)?

Answer: ART is the use of a combination of medicines that suppress HIV replication, restore immune function, and prevent illness and transmission.

Source: <https://hivinfo.nih.gov/>

Q34: When should treatment start?

Answer: Immediately after diagnosis, regardless of CD4 count (treat all).

Source: <https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv>

Q35: Why is adherence important?

Answer: Taking ART exactly as prescribed is essential to achieve and maintain viral suppression, prevent illness, avoid resistance, and enable U=U.

Source: <https://hivinfo.nih.gov/>

Q36: What happens if I miss a dose?

Answer: Take the missed dose as soon as you remember unless it's close to the next dose; do not double up. Frequent missed doses can lead to treatment failure consult your provider.

Source: <https://hivinfo.nih.gov/>

Q37: What side effects can ART have?

Answer: Side effects vary by regimen and are usually manageable; modern first line regimens are generally well tolerated. Discuss specific effects with your provider.

Source: <https://hivinfo.nih.gov/>

Q38: What is drug resistance?

Answer: HIV can mutate, reducing a drug effectiveness; resistance emerges especially with poor adherence. Resistance testing guides regimen choice.

Source: <https://hivinfo.nih.gov/>

Q39: Can HIV be cured?

Answer: There is no widely available cure; a few rare cases achieved long term remission after complex procedures, but for most people, lifelong ART is required.

Source: <https://hivinfo.nih.gov/>

Q40: What is U=U?

Answer: Undetectable = Untransmittable: people with sustained undetectable viral load do not sexually transmit HIV.

Source: <https://www.cdc.gov/hiv/>

Q41: What is RA 11166?

Answer: The Philippine HIV and AIDS Policy Act of 2018, which updates and strengthens the national response, protects confidentiality, prohibits discrimination, and affirms voluntary testing.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q42: Does the law protect confidentiality?

Answer: Yes. RA 11166 guarantees confidentiality of HIV testing and related medical information except in limited cases provided by law.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q43: Is discrimination against people with HIV illegal?

Answer: Yes. RA 11166 prohibits discrimination based on actual or perceived HIV status in employment, education, health care, housing, and other settings.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q44: Can employers require HIV tests?

Answer: No. Mandatory HIV testing for employment is unlawful under Philippine law.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q45: Are students with HIV protected?

Answer: Yes. RA 11166 protects students from discrimination based on HIV status in educational settings.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q46: Can healthcare workers refuse treatment?

Answer: No. Refusing care because of a person HIV status is discriminatory and prohibited under RA 11166.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q47: Are insurance companies allowed to deny coverage?

Answer: Answer: RA 11166 prohibits discrimination in health services; denial solely due to HIV status is unlawful.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q48: Are HIV test results needed for marriage?

Answer: No. Compulsory HIV testing, including as a prerequisite for marriage, is unlawful.

Source: https://lawphil.net/statutes/repacts/ra1998/ra_8504_1998.html

Q49: Is HIV a gay disease?

Answer: No. HIV can affect anyone; globally, women and girls account for about half of people living with HIV.

Source: <https://www.unaids.org/en/resources/fact-sheet>

Q50: Can you get HIV from hugging?

Answer: No. HIV is not spread by casual contact such as hugging, shaking hands, or sharing toilets.

Source: <https://www.cdc.gov/hiv/index.html>

Q51: Can sharing toilets transmit HIV?

Answer: No. HIV does not survive well outside the body and is not spread by toilets or casual contact.

Source: <https://www.cdc.gov/hiv/index.html>

Q52: Does witchcraft cure HIV?

Answer: No. There is no traditional or alternative cure for HIV; effective control requires antiretroviral therapy.

Source: <https://hivinfo.nih.gov/>

Q53: Can HIV positive parents have HIV negative babies?

Answer: Yes. With effective ART, viral suppression, appropriate delivery planning, and infant prophylaxis, the risk of mother to child transmission can be reduced to <1-2%.

Source: <https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv/strategic-information/hiv-data-and-statistics>

Q54: Is HIV automatically fatal?

Answer: No. With ART and care, people with HIV can live long, healthy lives.

Source: <https://www.cdc.gov/hiv/index.html>

Q55: Can women with HIV have healthy babies?

Answer: Yes. With timely ART and perinatal care, most women with HIV can have healthy, HIV negative infants.

Source: <https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv>

Q56: How can mother to child transmission be prevented?

Answer: Maternal ART to achieve viral suppression, safe delivery planning, infant antiretroviral prophylaxis, and appropriate infant feeding counseling.

Source: <https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv>

Q57: Should HIV positive mothers breastfeed? If the maternal viral load is high near delivery, a planned cesarean may be recommended; if virally suppressed, vaginal delivery is often appropriate.

Answer: Guidance depends on setting and viral suppression. Many programs support breastfeeding with maternal ART and close follow up; discuss individualized plans with clinicians.

Source: <https://www.who.int/>

Q58: When should a pregnant woman start ART?

Answer: Immediately ART is recommended for all pregnant and breastfeeding women with HIV as soon as possible.

Source: <https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv>

Q59: Is a C-section recommended?

Answer: If the maternal viral load is high near delivery, a planned cesarean may be recommended; if virally suppressed, vaginal delivery is often appropriate.

Source: <https://hivinfo.nih.gov/>

Q60: Can HIV be transmitted during delivery?

Answer: Yes, without effective ART; the risk is greatly reduced when the mother is on ART and virally suppressed.

Source: <https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/hiv>

Q61: Do infants need HIV medicine?

Answer: HIV exposed infants typically receive antiretroviral prophylaxis after birth; regimens depend on maternal viral load and national guidelines.

Source: <https://hivinfo.nih.gov/>

Q62: Is HIV test required during pregnancy?

Answer: HIV testing should be offered during pregnancy with informed consent; compulsory testing is unlawful in the Philippines.

Source: https://pnac.doh.gov.ph/wp-content/uploads/2023/08/IRR_of_RA_11166.pdf

Q63: How can I live a normal life with HIV?

Answer: Start and stay on ART, keep regular clinic follow up, maintain a healthy lifestyle, and seek psychosocial support; with care, many people have normal life expectancy.

Source: <https://www.cdc.gov/hiv/index.html>

Q64: What viral load counts as 'undetectable' or 'suppressed'?

Answer: WHO categorizes viral loads as: undetectable (not detected by the test used), suppressed (detected but <1,000 copies/mL), and unsuppressed (>1,000 copies/mL). Many U.S. programs use <200 copies/mL as the threshold for 'undetectable' in the context of U=U.

Source: <https://www.who.int/publications/i/item/9789240055179>

Q65: What viral load threshold does CDC use for U=U?

Answer: CDC uses a threshold of less than 200 copies/mL to define 'undetectable' for the purposes of 'Undetectable = Untransmittable (U=U)'.

Source: <https://stacks.cdc.gov/view/cdc/159484>

Q66: How soon after a possible exposure should PEP be started?

Answer: Start PEP as soon as possible and no later than 72 hours after a potential exposure, then take it for 28 days.

Source: <https://www.cdc.gov/hiv/prevention/pep.html>

Q67: How long do you need to take PEP?

Answer: A full 28-day course is recommended after starting within 72 hours of exposure.

Source: <https://www.cdc.gov/stophivtogether/hiv-prevention/pep.html>

Q68: What PrEP options are available?

Answer: PrEP options include daily oral TDF/FTC for all at-risk people, daily oral TAF/FTC for sexual exposure excluding receptive vaginal sex, and long acting injectable cabotegravir (every 2 months) for sexual exposure.

Source: <https://www.cdc.gov/hivnexus/hcp/prep/index.html>

Q69: How long before PrEP becomes protective?

Answer: With daily oral TDF/FTC, maximum protection is reached in about 7 days for receptive anal sex and about 21 days for receptive vaginal sex and injection drug use.

Source: <https://www.cdc.gov/mmwr/volumes/74/rr/rr7401a1.htm>

Q70: What is the HIV testing window period?

Answer: It's the time between exposure and when a test can accurately detect HIV. Antigen/antibody tests and NATs detect infection sooner than antibody-only tests.

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-testing>

Q71: Which HIV test is most commonly used today?

Answer: Laboratories and many clinics commonly use antigen/antibody tests that can detect both HIV antigens and antibodies.

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-testing>

Q72: What is the HIV life cycle?

Answer: HIV goes through stages like binding, fusion, reverse transcription, integration, replication, assembly, and budding. ART targets multiple stages to stop the virus from multiplying.

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-life-cycle>

Q73: What are the stages of HIV infection?

Answer: There are three: acute HIV infection (2-4 weeks after exposure), chronic HIV infection (clinical latency), and AIDS (advanced disease).

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/stages-hiv-infection>

Q74: Should ART be started regardless of CD4 count?

Answer: Yes. WHO recommends treating all people living with HIV, ideally with rapid initiation and even same day start when ready.

Source: <https://www.who.int/publications/i/item/9789240031593>

Q75: What does 'rapid ART initiation' mean?

Answer: WHO defines rapid initiation as starting ART within 7 days of diagnosis and recommends same day start when the person is ready and no clinical contraindication exists.

Source: <https://www.who.int/publications/i/item/9789241550062>

Q76: Can ART prevent mother to child transmission?

Answer: Effective ART and appropriate care can prevent transmission during pregnancy, delivery and breastfeeding.

Source: <https://www.who.int/health-topics/hiv-aids>

Q77: How many people are living with HIV globally and how many on ART?

Answer: By 2024, about 39-41 million people were living with HIV; roughly three quarters were receiving ART worldwide.

Source: <https://www.unaids.org/en/resources/fact-sheet>

Q78: What is the age of consent for HIV testing in the Philippines?

Answer: Under RA 11166, individuals aged 15 to below 18 can consent to HIV testing without parental/guardian consent.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q79: Can people younger than 15 be tested without parental consent?

Answer: Yes. If the minor is pregnant or engaged in high-risk behavior, testing can proceed with assistance from a licensed social worker or health worker, per RA 11166 IRR.

Source: https://pnac.doh.gov.ph/wp-content/uploads/2023/08/IRR_of_RA_11166.pdf

Q80: Is compulsory HIV testing allowed in the Philippines?

Answer: Generally, no, except in limited instances set by law (e.g., specific criminal cases, family code issues, and as a prerequisite for blood donation) as outlined in RA 11166 IRR.

Source: https://pnac.doh.gov.ph/wp-content/uploads/2023/08/IRR_of_RA_11166.pdf

Q81: What happened to RA 8504 (1998)?

Answer: RA 8504, the Philippine AIDS Prevention and Control Act of 1998, was repealed and replaced by RA 11166 in 2018.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q82: Is HIV testing part of routine prenatal care in the Philippines?

Answer: Yes. RA 11166 strengthens routine testing in prenatal care to prevent mother to child transmission.

Source: <https://www.who.int/philippines/news/detail/11-01-2019-new-law-important-boost-to-hiv-response-in-the-philippines>

Q83: Are HIV-related records confidential under Philippine law?

Answer: Yes. RA 11166 upholds confidentiality of HIV test results and related records, with penalties for unlawful disclosure.

Source: https://lawphil.net/statutes/repacts/ra2018/ra_11166_2018.html

Q84: Can someone with an undetectable viral load transmit HIV through sex?

Answer: No. People who maintain an undetectable viral load do not transmit HIV sexually (U=U).

Source: <https://www.cdc.gov/stophivtogether/hiv-treatment/index.html>

Q85: Does being undetectable also eliminate risk from sharing needles?

Answer: Viral suppression likely reduces risk, but there is not enough evidence to say it eliminates transmission risk via shared needles.

Source: <https://www.cdc.gov/stophivtogether/hiv-treatment/index.html>

Q86: Is there a long-acting injectable HIV treatment?

Answer: Yes. A complete regimen of long acting cabotegravir plus rilpivirine can be given as injections every 1-2 months for people who are virologically suppressed and meet criteria.

Source: <https://www.hiv.gov/blog/fda-approves-first-extended-release-injectable-drug-regimen-adults-living-hiv>

Q87: How often should people with ongoing risk get tested for HIV?

Answer: CDC recommends at least annual testing for people at ongoing risk (e.g., multiple sex partners, gay and bisexual men, people who inject drugs); some may benefit from testing every 3-6 months.

Source: <https://www.cdc.gov/hiv/testing/index.html>

Q88: How long does it usually take to become 'undetectable' after starting ART?

Answer: Many people who take ART as prescribed become undetectable within about 6 months.

Source: <https://www.hiv.gov/hiv-basics/staying-in-hiv-care/hiv-treatment/undetectable-equals-untransmittable>

Q89: Why is 'treat all' the global standard now?

Answer: Starting ART in everyone with HIV improves health, reduces AID related illness and death, and prevents transmission to others.

Source: <https://www.who.int/publications/i/item/9789240031593>

Q90: What is the scientific consensus on the origin of HIV-1?

Answer: HIV-1 originated from a chimpanzee virus (SIVcpz) that crossed into humans; SIVcpz itself is a recombinant of monkey SIVs.

Source: <https://pmc.ncbi.nlm.nih.gov/articles/PMC3234451/>

Q91: When do acute HIV symptoms usually appear?

Answer: Often 2-4 weeks after infection; not everyone has symptoms.

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/stages-hiv-infection>

Q92: What do 'viral load' and 'CD4 count' measure?

Answer: Viral load is the amount of HIV in the blood; CD4 count measures immune cells. ART aims to keep viral load undetectable and CD4 count healthy.

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-life-cycle>

Q93: Are HIV self-testing options allowed in the Philippines?

Answer: The DOH permits HIV self-testing under national guidelines, with linkage to confirmatory testing and care per RA 11166 implementation.

Source: <https://www.ship.ph/wp-content/uploads/2022/08/ao2022-0035-hts-guidelines.pdf>

Q94: Do we have an HIV cure or vaccine yet?

Answer: There is currently no widely available cure or preventive vaccine for HIV. Treatment and prevention tools like ART, PrEP, PEP and condoms are highly effective.

Source: <https://www.cdc.gov/hiv/index.html>

Q95: Do syringe services programs help prevent HIV?

Answer: Yes. Access to sterile needles and syringes reduces HIV transmission among people who inject drugs and connects people to care, including PrEP.

Source: <https://www.cdc.gov/ssp>

Q96: How effective are condoms at preventing HIV?

Answer: When used consistently and correctly, condoms are highly effective at preventing sexual transmission of HIV and other STIs.

Source: <https://www.cdc.gov/condomeffectiveness>

Q97: Is injectable PrEP more effective than daily pills?

Answer: Injectable cabotegravir is about 99% effective for sexual transmission and was superior to daily oral TDF/FTC in key trials, largely due to adherence advantages.

Source: <https://www.cdc.gov/hivnexus/hcp/prep/index.html>

Q98: Is long-acting cabotegravir (CAB-LA) PrEP recommended in pregnancy?

Answer: Guidelines note CAB-LA is FDA approved for vaginal exposure, but data in pregnancy remain limited; consult perinatal guidelines when considering use.

Source: <https://clinicalinfo.hiv.gov/en/guidelines/perinatal/pre-exposure-prophylaxis-prep-prevent-hiv>

Q99: What's new in the 2025 CDC nPEP (non-occupational PEP) guidelines?

Answer: They include newer ARV options and considerations for people previously exposed to long-acting injectables, plus updated testing guidance.

Source: <https://www.cdc.gov/mmwr/volumes/74/rr/rr7401a1.htm>

Q100: How did the chimpanzee virus that led to HIV-1 arise?

Answer: SIV in chimpanzees (SIVcpz) is a recombinant of SIVs from at least two monkey species, which later crossed to humans.

Source: <https://pmc.ncbi.nlm.nih.gov/articles/PMC1489021/>

Q101: What is SIV?

Answer: Simian Immunodeficiency Virus (SIV) is a retrovirus that infects African non-human primates. It is closely related to Human Immunodeficiency Virus (HIV), and cross-species transmission of SIV to humans gave rise to HIV-1 and HIV-2.

Source: <https://doi.org/10.1101/cshperspect.a006841>