

## THE 90-90-90 STRATEGY AND ITS CARE IMPLICATIONS IN SPAIN

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## THE 90-90-90 STRATEGY AND ITS CARE IMPLICATIONS IN SPAIN

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**Abstract:** The HIV/AIDS epidemic is a global public health problem. The main international organisations coordinating the fight against HIV/AIDS aim to end the AIDS epidemic by 2030. To reach this goal, the targets of the 90-90-90 Strategy must be achieved. This article explains what this strategy consists of and mentions care interventions that align with it.

**Keywords:** HIV, AIDS, 90-90-90 strategy.

## ESTRATEGIA 90-90-90 Y SUS IMPLICACIONES ASISTENCIALES EN ESPAÑA

**Resumen.** La epidemia del VIH/sida es un problema de salud pública a nivel mundial. Los principales organismos internacionales que coordinan la lucha contra el VIH/sida se proponen acabar con la epidemia de sida en el 2030 y, para ello, es preciso lograr los objetivos de la Estrategia 90-90-90. En este artículo se explica en qué consiste esta estrategia y menciona intervenciones asistenciales alineadas con ella.

**Palabras clave:** VIH, sida, estrategia 90-90-90

## ESTRATÉGIA 90-90-90 E AS SUAS IMPLICAÇÕES A NÍVEL DE ASSISTÊNCIA EM ESPANHA

**Resumo:** A epidemia do VIH / da SIDA é um problema de saúde pública a nível mundial. Os principais organismos internacionais que coordenam a luta contra o VIH / a SIDA formaram o propósito de acabar com a epidemia de SIDA em 2030 e, para esse efeito, é preciso alcançar os objetivos da Estratégia 90-90-90. Neste artigo, explica-se em que consiste esta estratégia e mencionam-se intervenções a nível da assistência alinhadas com esta estratégia.

**Palavras-chave:** VIH, SIDA, estratégia 90-90-90.

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### INTRODUCTION

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HIV stands for human immunodeficiency virus. This virus causes a progressive destruction of the immune system which, without treatment, results in death.

AIDS, on the other hand, stands for acquired immunodeficiency syndrome, and corresponds to the last phase of an HIV infection which has been left untreated.

HIV is mainly transmitted by:

- Sex without a condom
- Sharing drug-injecting equipment
- From mother to child during pregnancy, childbirth, or breastfeeding

HIV can also be transmitted by infected blood transfusions or clotting factors, although this it is only in exceptional circumstances that HIV is via this route due to routine testing of blood for HIV antibodies (European Centre for Disease Prevention and Control, 2019).

### BACKGROUND

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The HIV/AIDS epidemic has been a global public health problem since its discovery at the end of the 20<sup>th</sup> century. The first AIDS cases were diagnosed by Dr. Michael Gottlieb in San Francisco (USA), in 1981. From that moment on, the annual incidence of AIDS has been rising to a peak in 1997, when almost 3 million cases were reported. Fortunately, thanks to the emergence of highly active antiretroviral therapy (HAART), the incidence of HIV infection has been reduced by 40% to the present day (1.7 million in 2018) (ONUSIDA, 2019b)

### 90-90-90 STRATEGY

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By the end of 2013, the Joint United Nations Programme on HIV/AIDS (UNAIDS) set out to gather the necessary national and international support to update HIV treatment goals after 2015. While the previous goals sought a gradual increase in the response, the aim after 2015 is nothing less than the end of the AIDS epidemic by 2030 (ONUSIDA, 2019a).

To achieve this, the UNAIDS states that the three “90” targets must be met by 2020 (ONUSIDA, 2019a). These targets are the following:

1. 90% of all people infected with HIV will know their HIV status.
2. 90% of all people diagnosed with HIV will receive sustained antiretroviral therapy.
3. 90% of all people receiving antiretroviral therapy will have viral suppression (plasma viral load (PVL) < 50 copies HIV/mL).

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According to the UNAIDS, 88% of HIV infections in Western Europe occur in key populations and their sexual partners. The risk of contracting HIV in these populations is as follows:

- 22 times higher among men who have sex with men
- 22 times higher among people who inject drugs
- 21 times higher for sex workers
- 12 times higher for transgender people (ONUSIDA, 2019b)

### Status of the care continuum in Portugal and Spain

Is Europe on track to end AIDS by 2030? The results of the 90-90-90 targets in 2018 stand at 86%-91%-92% in EU/EEA (European Centre for Disease Prevention and Control, 2018)

The following table shows the strategy fulfilment data for Portugal and Spain (Table 1. Care continuum in Portugal and Spain, 2018).

*Table 1. Care continuum in Portugal and Spain, 2018*

	90% diagnosticados	90% tratados	90% supresión viral
<b>Portugal</b>	92 %	87 %	90 %
<b>España</b>	82 %	97 %	88 %

*Source: Adapted from the European Centre for Disease Prevention and Control, WHO Regional Office for Europe. HIV/AIDS surveillance in Europe 2018 – 2017 data*

*Made by: Dirección General de Salud Pública. Consejería de Sanidad de Galicia, Spain.*

The UNAIDS predicts that by the time the three “90” are achieved, 73% of people infected with HIV will attain suppressed viral load (SVL). According to the last available data, neither Portugal nor Spain has reached this threshold. However, their results are above the regional average (43%), with 72% and 71% respectively (European Centre for Disease Prevention and Control, 2018).

### 90-90-90 STRATEGY IN PRIMARY, MATERNAL, AND CHILD CARE

In order to achieve the 90-90-90 Strategy goals, it is essential to maintain some care activities that were already being conducted and to incorporate new ones. Following are some recommendations from the scientific societies that fit into the 90-90-90 Strategy for primary, maternal, and paediatric care.

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### Primary care

#### **First 90: 90% of all people infected with HIV will know their HIV status.**

In primary care, HIV testing is recommended for any individual who requests it under the following circumstances (Ministerio de Sanidad Servicios Sociales e Igualdad y Plan Nacional sobre Sida, 2014):

1. The individual presents with symptoms consistent with HIV infection or AIDS.
2. Routine screening: for prisoners, pregnant women, and the general population aged between 18 and 59 years old who meet certain criteria, including never having been tested for HIV.
3. Screening for individuals in vulnerable environments (coming from countries with a high prevalence of HIV, etc.) or individuals who engage in risky behaviours (sex between men without a condom, etc.).
4. Mandatory screening: in tissue and organ donation, and also in assisted human reproduction techniques.

Individuals who engage in risky practices must be offered HIV testing at least once a year (Ministerio de Sanidad Servicios Sociales e Igualdad y Plan Nacional sobre Sida, 2014).

#### **Second 90: 90% of all people diagnosed with HIV will receive sustained antiretroviral therapy.**

In the event of a positive HIV serological test, the individual should be immediately referred to a service specialising in HIV infection. Antiretroviral treatment (ART) should be started as early as possible once the diagnosis is confirmed (A-III) (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

ART is recommended for all HIV-infected patients in order to prevent the progression of the disease, to decrease the transmission of the virus, and to limit harmful effects on possible coexisting morbidities (A-I) (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

#### **Third 90: 90% of all people receiving antiretroviral therapy will have viral suppression.**

PVL should be determined before starting ART and periodically during treatment in order to confirm and monitor viral suppression (A-II) (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

The goal in viral suppression should be a PVL < 50 copies of HIV/mL (A-II) (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

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### Recommendations for maternal care

#### **First 90: 90% of all women infected with HIV will know their HIV status.**

It is mandatory to provide all pregnant women with appropriate information and HIV serological testing (SPNS GeSIDA SEGO y SEIP, 2018).

The identification of HIV-infected women prior to pregnancy or during the first weeks of pregnancy is crucial for providing optimal treatment to prevent vertical transmission of HIV (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

Women who engage in risky behaviours for HIV infection during pregnancy, especially with an infected partner, will be tested at least once every three months (SPNS GeSIDA SEGO y SEIP, 2018).

#### **Second 90: 90% of all women diagnosed with HIV will receive sustained antiretroviral therapy.**

Gestation is always an absolute indication for antiretroviral treatment (SPNS GeSIDA SEGO y SEIP, 2018).

All infected pregnant women should receive counselling regarding the need for an antiretroviral treatment, HIV transmission prevention, and the possible effects that antiretroviral drugs might have on foetuses and neonates (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

#### **Third 90: 90% of all women receiving antiretroviral therapy will have viral suppression.**

The levels of CD4 lymphocytes and PVL in pregnant women infected with HIV must be monitored at prenatal visits (SPNS GeSIDA SEGO y SEIP, 2018).

### Recommendations in paediatric care

#### **First 90: 90% of all children infected with HIV will know their HIV status.**

For children born to women infected with HIV, the determination of viral RNA and/or DNA is recommended in the first 48 hours of life (not using cord blood) (B-I). This should be repeated within two weeks and 3-4 months (A-II) after stopping antiretroviral prophylaxis (SPNS GeSIDA SEGO y SEIP, 2018)

To diagnose HIV infection in children under 18 months of age with perinatal or postnatal exposure to the virus, virological trials should be used to detect and quantify viral RNA or DNA. Antibody detection should not be used (A-II) (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

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### **Second 90: 90% of all children diagnosed with HIV will receive sustained antiretroviral therapy**

Very early treatment in children infected by vertical transmission is recommended, not only for its clinical benefits, but also for the decrease in viral load (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

### **Third 90: 90% of children receiving antiretroviral therapy will have viral suppression.**

The aim of ART is to achieve viral suppression within 24 weeks of starting the treatment (A-II) (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

Consultation with a paediatric HIV infection expert is recommended if virological failure is suspected and adherence failure has been previously ruled out (B-III) (Panel de expertos de Gesida y Plan Nacional sobre el Sida, 2019).

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### RINSAD

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