

# A Community Based Centre for HIV detection in Barcelona (Spain) shows that most cases detected in MSM are early stage HIV infections

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## Introduction

The HIV epidemic in Western Europe is mostly driven by Men who have Sex with Men (ECDC, UNAIDS, WHO). Barcelona and its area have developed in the past decades as an attractive place for MSM. Studies show that almost 50% of all new cases of HIV diagnosis in this area are in MSM.

Projecte dels NOMS-Hispanosida implemented in 2006 BCN Checkpoint (a Community Based Centre for MSM) dedicated to early detection of HIV and syphilis and to assure better care (IAS2008, TUPE0424). We have evaluated the results of the three-year experience (2007-2009) of this project with the following results (IAS2010, THPE0279):

Year	Tests performed	Persons tested	HIV+ results	Prevalence
2007	1.098	938	37	3,9%
2008	1.272	1.162	72	6,2%
2009	2.496	2.216	113	5,1%
<b>Total</b>	<b>4.866</b>	<b>4.316</b>	<b>222</b>	

Studies show that individuals who know they are infected take steps to protect their sexual partners. Yet many MSM are unaware of their serostatus and may unknowingly be transmitting the virus to others. It's estimated that as many as 50% of HIV transmissions occur during the acute and early stage of the infection.

## Methodology

We analyzed the results of 2009: We tested 2.216 persons from which 113 were positive results, confirmed by Western Blot. During the counseling a questionnaire was used asking if the person had done an HIV test before, and, if so, when was the last time he did the test and had a negative result. Seventeen persons never had done a test before and are excluded in further analysis. One person did not answer this question and therefore was also excluded in further analysis:

Total positive results	113	
Never done a test before/No answer (17 + 1)	18	15,9%
Had done 1 or more tests before *	95	84,1%

\* The average number of tests done: 6,2 (Range: 1-30)

We assumed that if a person had done the test, with a negative result, during 2008 or 2009, the infection happened during the last 1½ year, and therefore is considered as an early stage HIV infection. This might also include primary HIV infection, but the limitation of our work doesn't allow this quantification.

As for the 95 positive results we analyzed the early stage infections by age groups, first by the total of positive results per group, and then corrected by those who never had done an HIV test before.



## Results

TABLE 1

Positive results classified by the year of the last HIV test with a negative result		
2007 or before	29	30,5%
2008	40	42,1%
2009	24	25,3%
Don't recall	2	2,1%
<b>Total</b>	<b>95</b>	<b>100,0%</b>

At least 64 out of 95 (67,4%) persons who did an HIV test in BCN Checkpoint during 2009 were at an early stage infection.

TABLE 2

Analysis per age group					
	≤24 years	25-34 years	35-44 years	≥45 years	Total
Never done a test before/No answer	4	4	6	4	18
%	40,0	7,4	14,6	50,0	
Had done 1 or more tests before	6	50	35	4	95
%	60,0	92,6	85,4	50,0	
<b>Total positive results</b>	<b>10</b>	<b>54</b>	<b>41</b>	<b>8</b>	<b>113</b>

TABLE 3

Positive results classified by age group and the year of the last HIV test with a negative result					
	≤24 years	25-34 years	35-44 years	≥45 years	Total
2007 or before	0	14	12	3	29
2008	4	22	14	0	40
2009	2	14	8	0	24
Don't recall	0	0	1	1	2
<b>Total</b>	<b>6</b>	<b>50</b>	<b>35</b>	<b>4</b>	<b>95</b>

TABLE 4

Number and percentage of early stage infections per age group of those who did a test previously					
	≤24 years	25-34 years	35-44 years *	≥45 years *	Total
Early stage infections	6	36	22	0	64
Total infections with previous negative test	6	50	35	4	95
%	100,0	72,0	62,9	0,0	

\* 1 person in this age group didn't recall the time of the last test

## Conclusions

- Around two out of every three HIV detections in BCN Checkpoint during 2009 were early stage infections.
- The percentage of early stage infections is higher in younger MSM.
- A Community Based Centre, with a strategy of regular HIV testing offered to the Most-At-Risk Populations (MARPs), in this case MSM, is able to detect early stage HIV infections.
- Clients show more interest in regular testing if the Centre sends out actively reminders every 6 or 12 months.
- Detection of early stage HIV infections might prevent new HIV transmissions in the MSM community and is cost-averting.
- HIV Counseling & Testing in a Community Based Centre should be part of a national prevention policy.

## Next steps

- BCN Checkpoint started in 2008 a prospective cohort study (ITACA) among 800 HIV negative MSM in Barcelona in order to monitor the incidence of HIV infection and to identify risk factors associated with seroconversion. First results may be expected in 2011.
- BCN Checkpoint started in 2009 a prospective study (CHECK-EAR) of HIV incidence and prevalence, and incidence of other STIs, Human Papillomavirus (HPV) and related pathologies in 200 HIV negative MSM in collaboration with HIVACAT, Fundació de Lluita contra la SIDA, Fundació Irsi-Caixa, Fundació Clínic de Barcelona and CEEISCAT.

## Further Information

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