

Hepatitis C Burden in Romania

2016-2017 Evaluation

2018 Challenges

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Bucharest, Romania

ROMANIA, HCV EPIDEMICS' UPDATE

- ❖ Total population 20,121,641 persons (2011 Census)
- ❖ **Prevalence:** 3,3%,
 - 663,981 persons potentially infected with HCV
 - ✓ 85% with potentially viral replication
 - ✓ 99% from genotype 1b infections (blood transfusion)
 - 563,406 potentially persons with active progressive disease
- ❖ **Incidence:** > 7,500 new cases of infection / year
 - 7,000-8,000 persons diagnosed with active disease / year
- ❖ **Romania, top 20 worldwide regarding the number of HCV patients**
 - 6,000 treated persons with DAA in 2016 (1.5%)



ROMANIA

The prevalence of HBV, HCV and HIV infection in Romania - a nationwide screening program for surveillance of viral infections

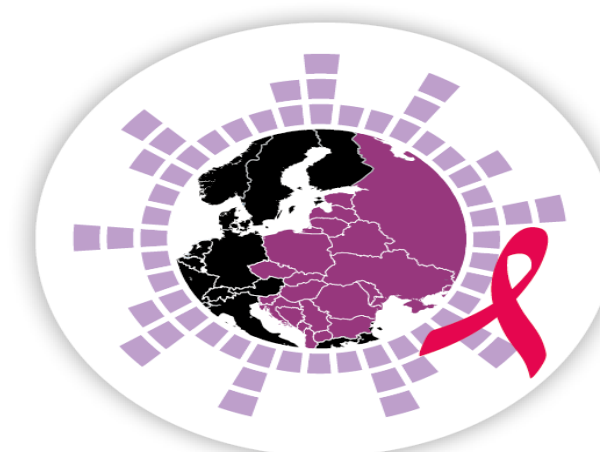
This study is part of the RO 19.02. Project “Strengthening the prevention and control of HIV/AIDS, HBV, HCV in Romania”, financed by the Norway Financial Mechanism 2009-2014, “Public Health Initiatives”.

12 000 persons screened

Median age **46** (IQR: 36, 57) years

62.7% females

Oana Săndulescu /October 2016
2nd Central and Eastern European Meeting on
Viral Hepatitis and Co-Infection with HIV



Methods

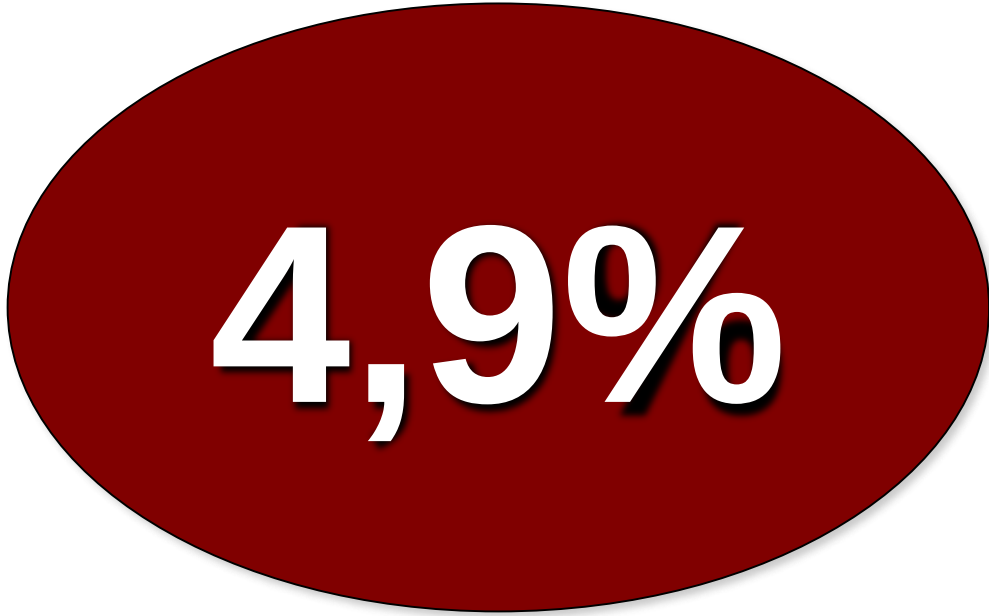
- **Nationwide screening program (2014-2016)**
 - HBsAg, anti-HCV, anti-HIV
- **Confirmation and characterization of positive cases**
 - HBV-DNA, HCV-RNA, HIV-RNA
- **Risk factor assessment**
 - Standardized paper-based questionnaire
 - Romanian population vs. international students
- **Statistical analysis: IBM SPSS Statistics v.22 (Armonk, USA)**

The 12th Edition of
**SCIENTIFIC DAYS OF THE NATIONAL INSTITUTE
FOR INFECTIOUS DISEASES “Prof. Dr. Matei Balș”**

Wednesday 23 November - Friday 25 November 2016
RIN Grand Hotel, Bucharest

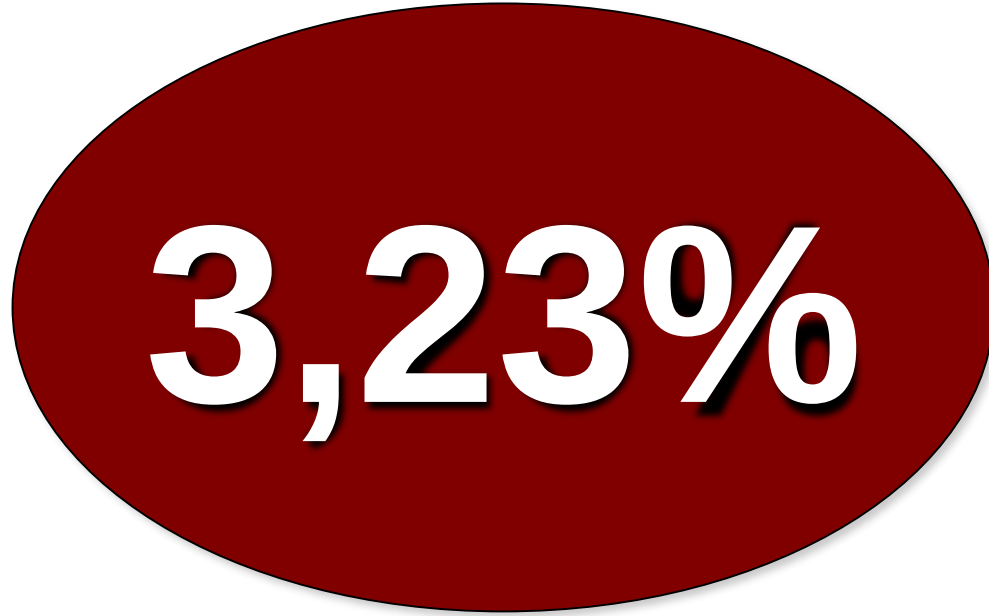


Romania ...



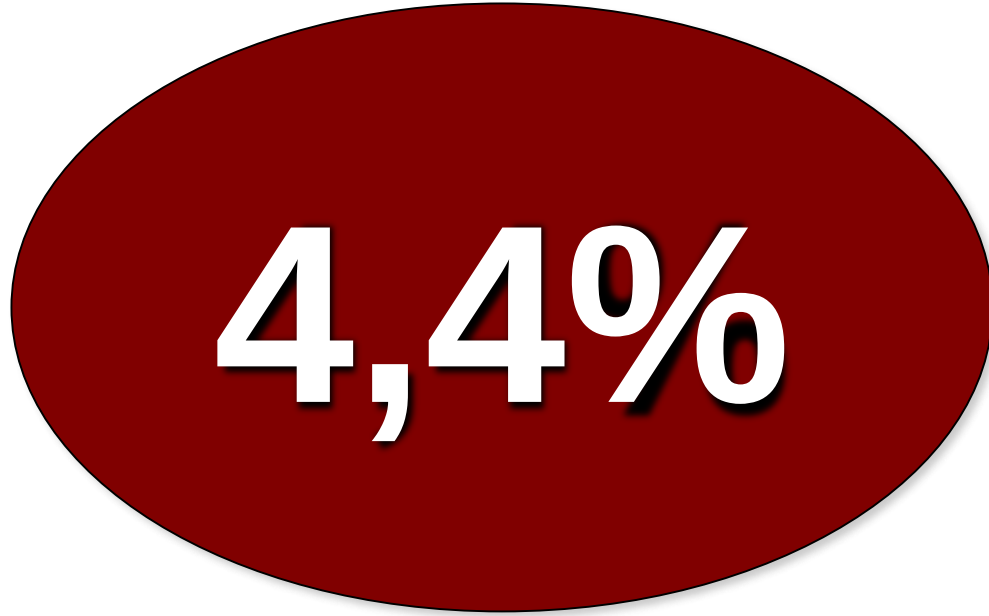
4,9%

Anuarul Statistic al României(<http://www.insse.ro/Anuar%20200S/CAPITOLE/cap2.pdf>
Molnar G. Și col., Bacteriologie, Virusologie, Parazitologie, epidemiologie 1994;30:141-149



3,23%

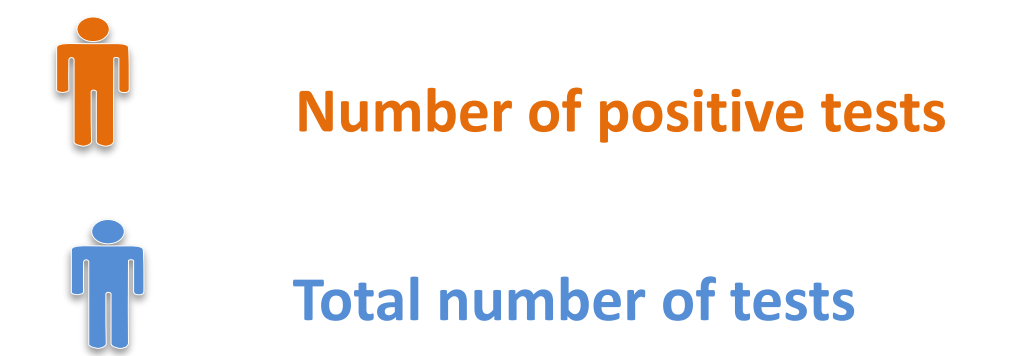
Molnar G. Și col., Bacteriologie, Virusologie, Parazitologie, epidemiologie 1994; 30:141-149; 2. Gheorghe L. și col – article in press 2009



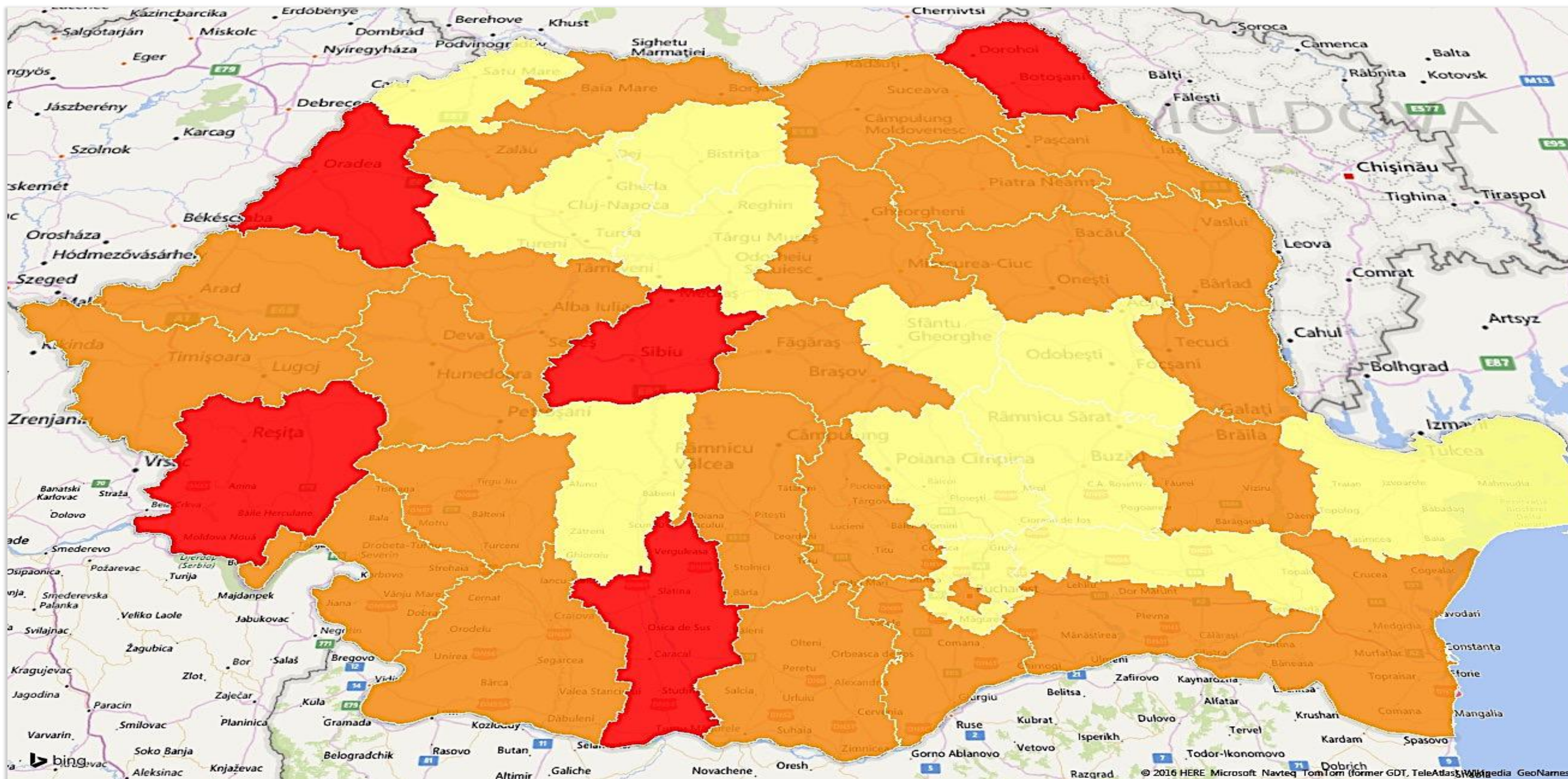
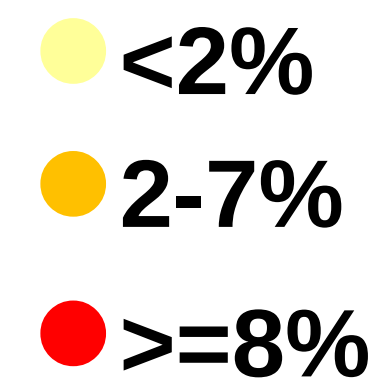
4,4%

Date obtinute din campaniile de testare 2014-2015, A Streinu-Cercel nepublicate

The diagram consists of two rows. The top row features an orange stick figure icon on the left, followed by the text "Number of positive tests" in orange. The bottom row features a blue stick figure icon on the left, followed by the text "Total number of tests" in blue.

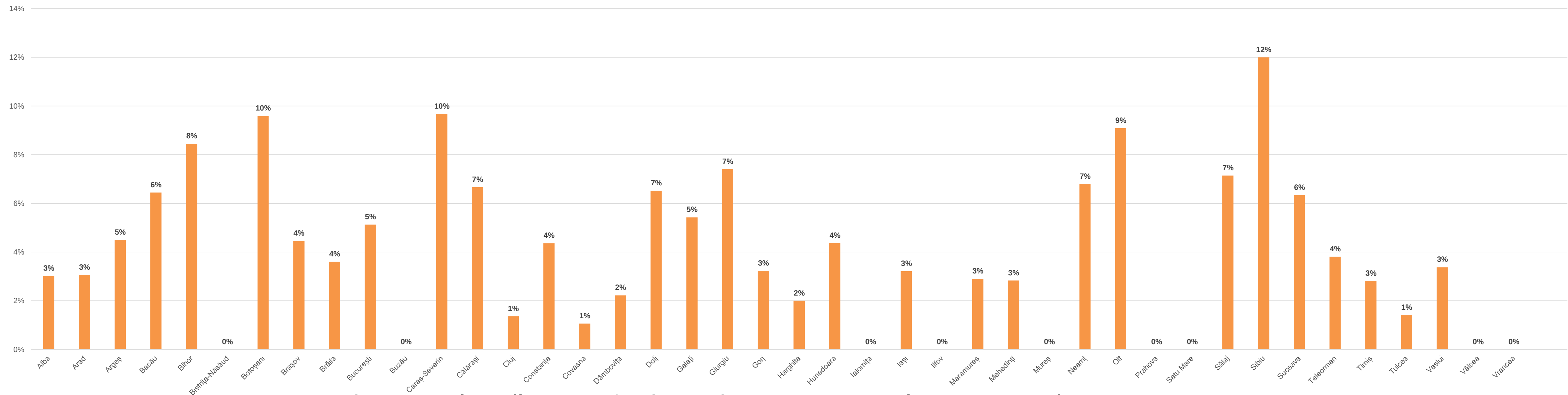


HCV hotspots



Positive HCV tests

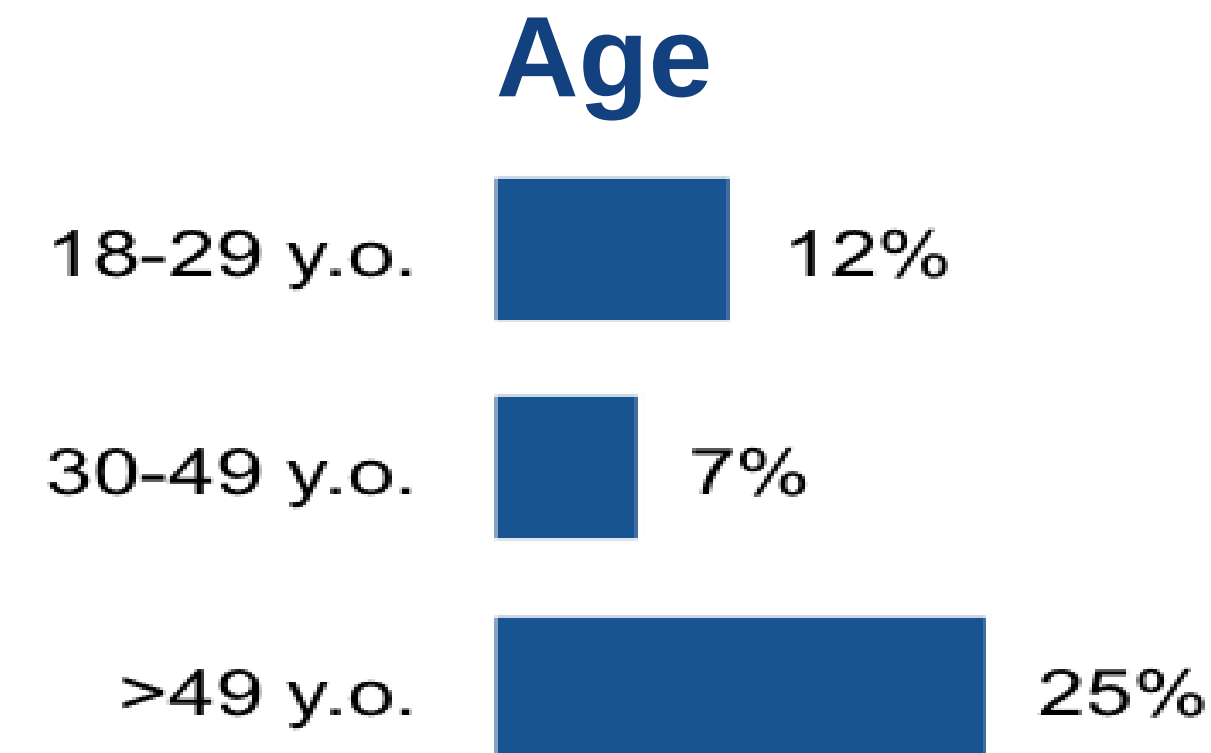
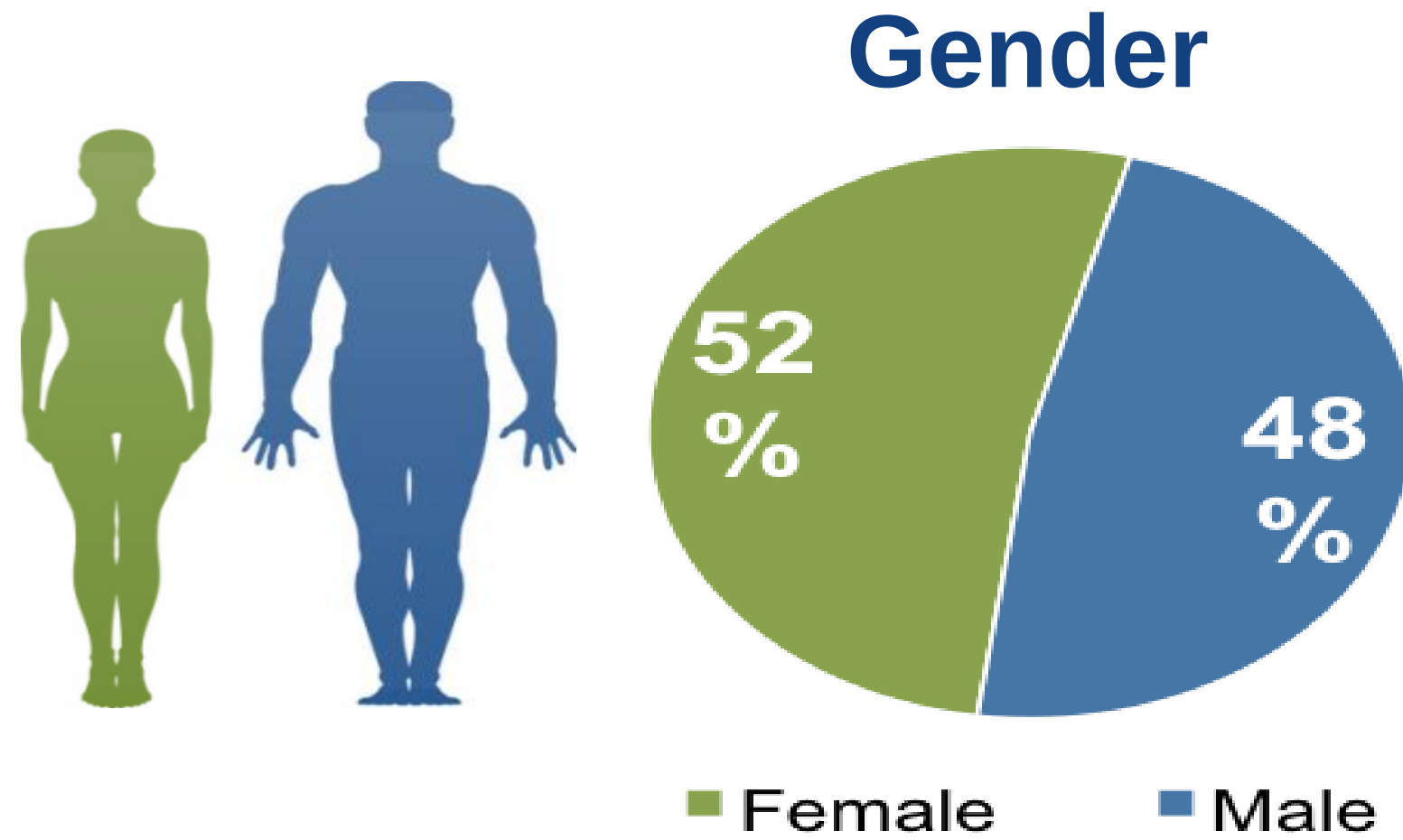
- 3.3% positive anti-HCV tests => **1.9%**
- 60.7% of the positive tests had negative **HCV-RNA**
- 9 counties in Romania were “HCV-free”



After screening in 2016

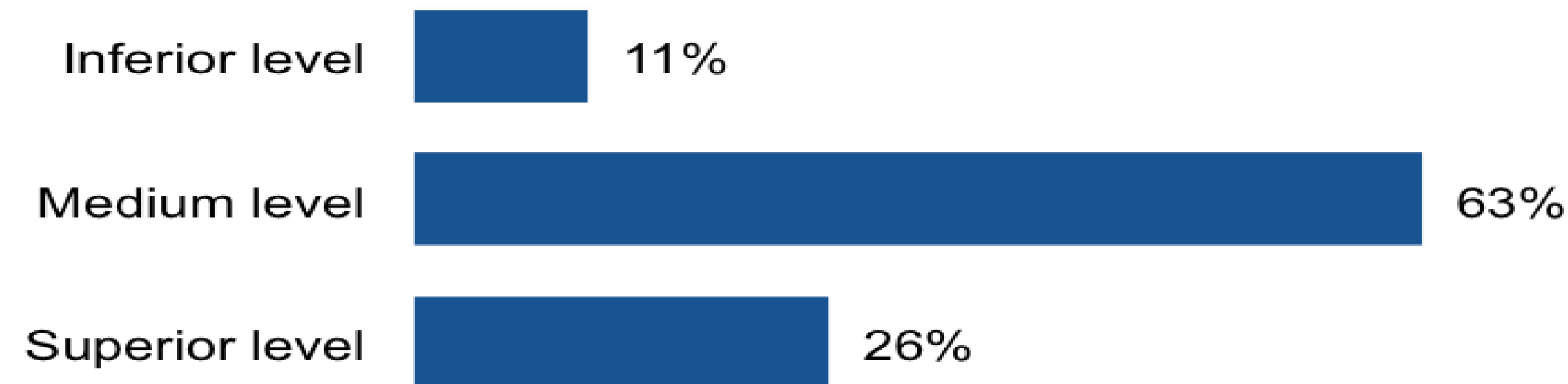
- Vaccination decreased the incidence of HBV infection 21-fold
- 12000 persons screened
 - 7.7% positive HBsAg
 - **1.9% confirmed HCV infection**
 - 0.4% positive HIV tests
- Targeted outreach programs in the identified hotspots

Knowledge, attitudes and practices of the general population regarding HIV/AIDS, HBV&HCV

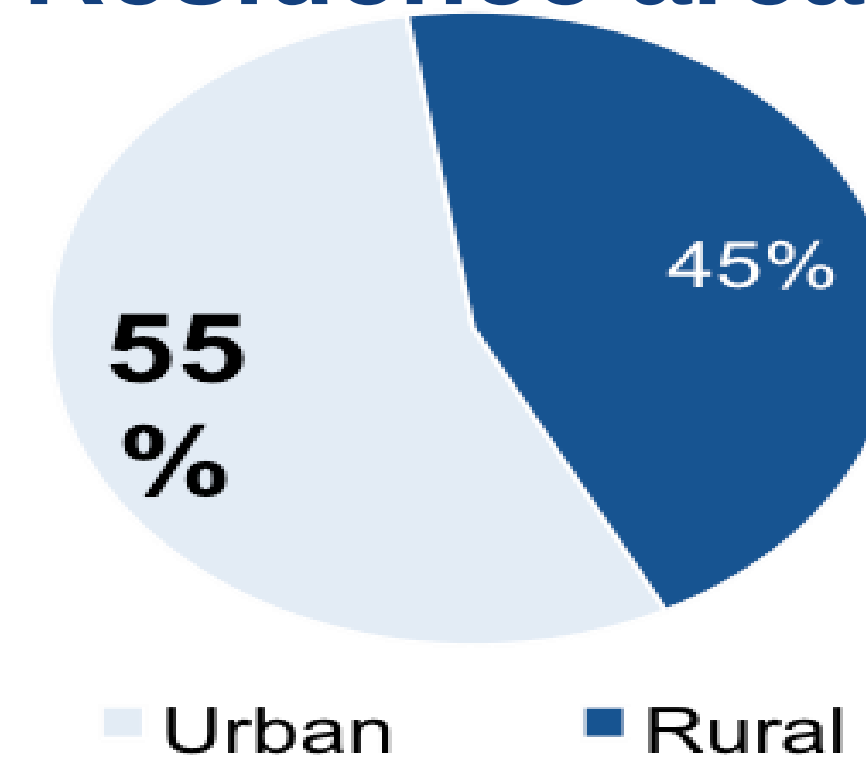


Average
46,5 y.o.

Educational level



Residence area

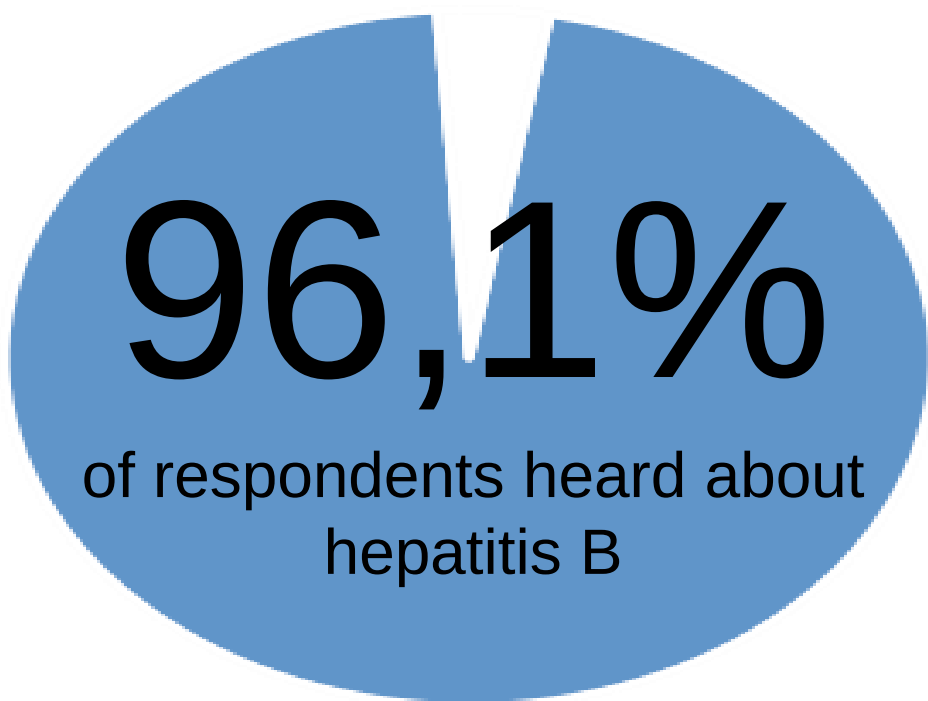


Number of cases: 1005 Sample: general population

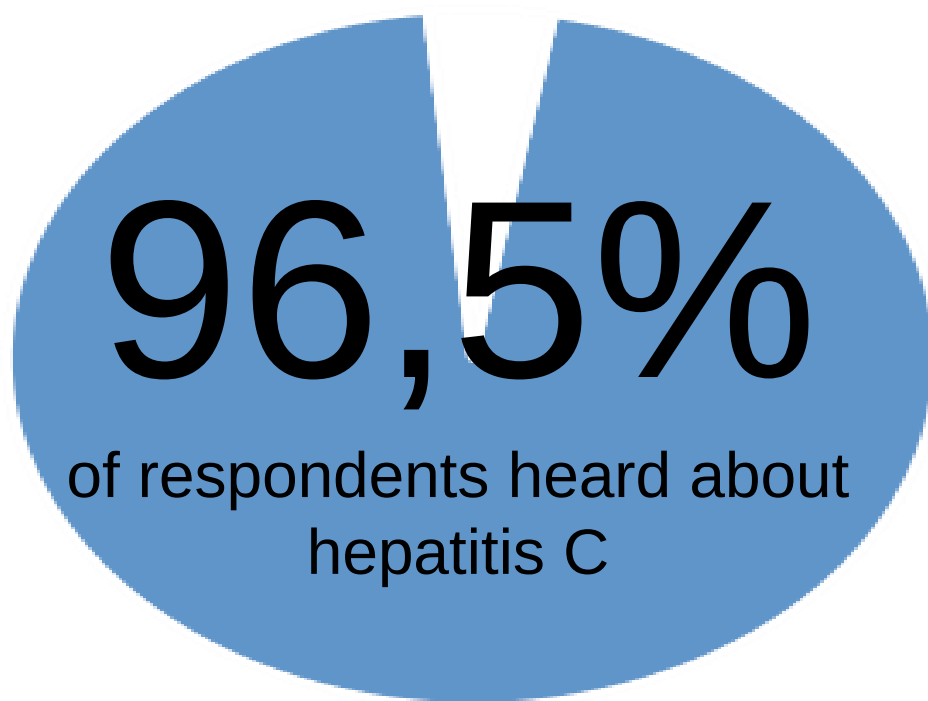
Disease awareness

How can HCV/HBV be transmitted?

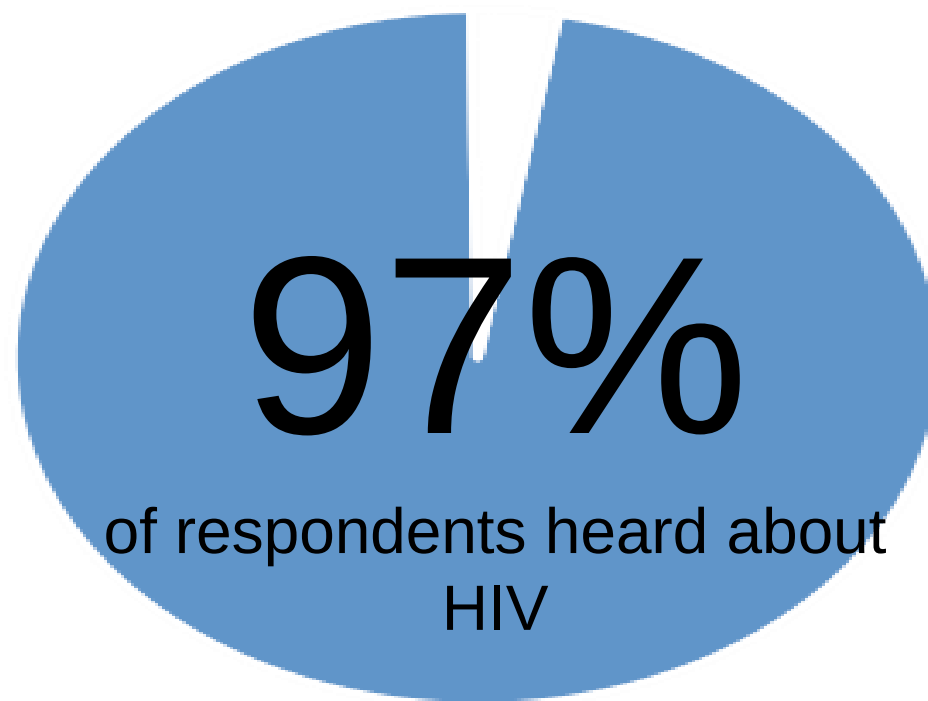
Hepatitis B



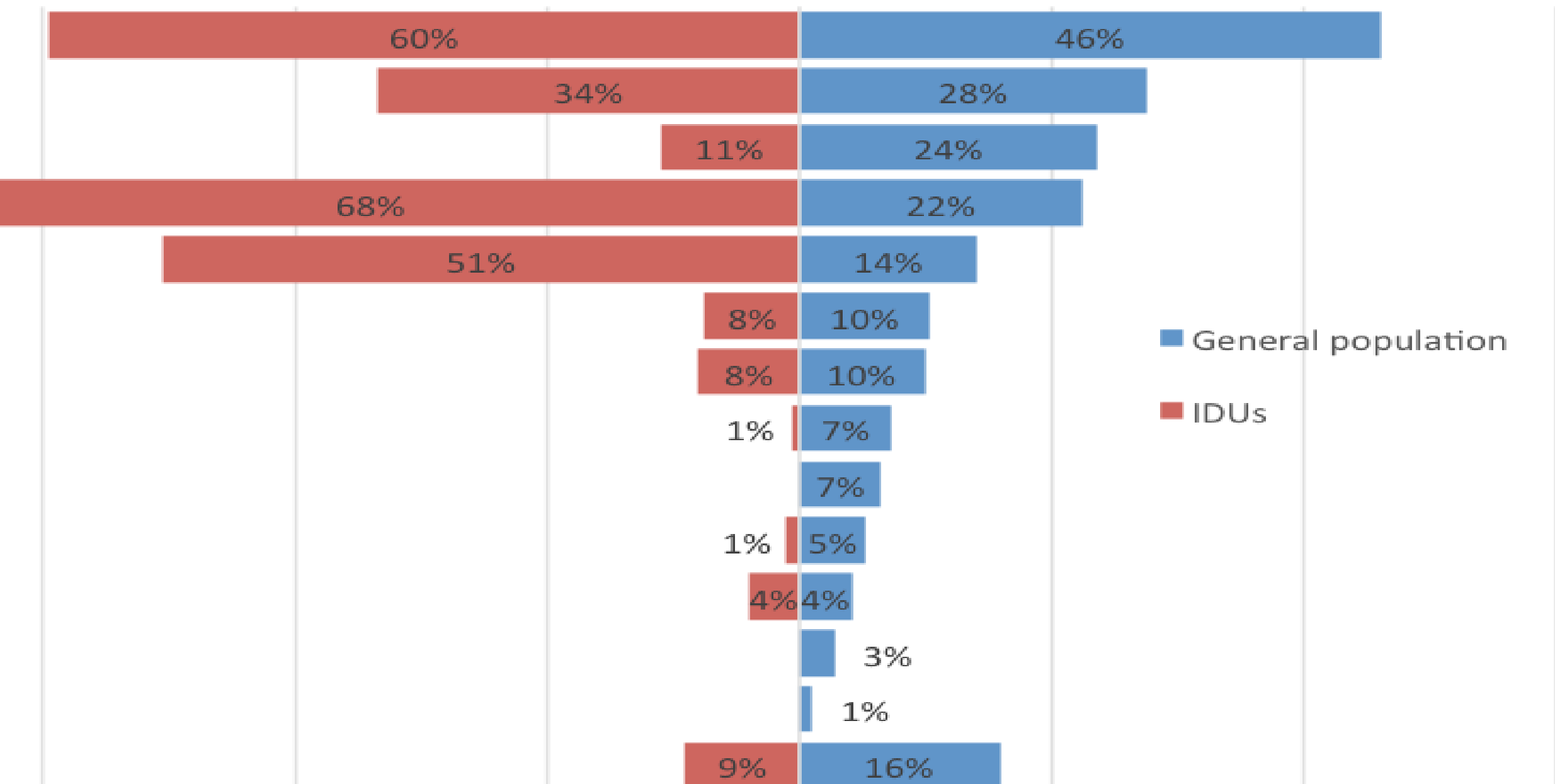
Hepatitis C



HIV



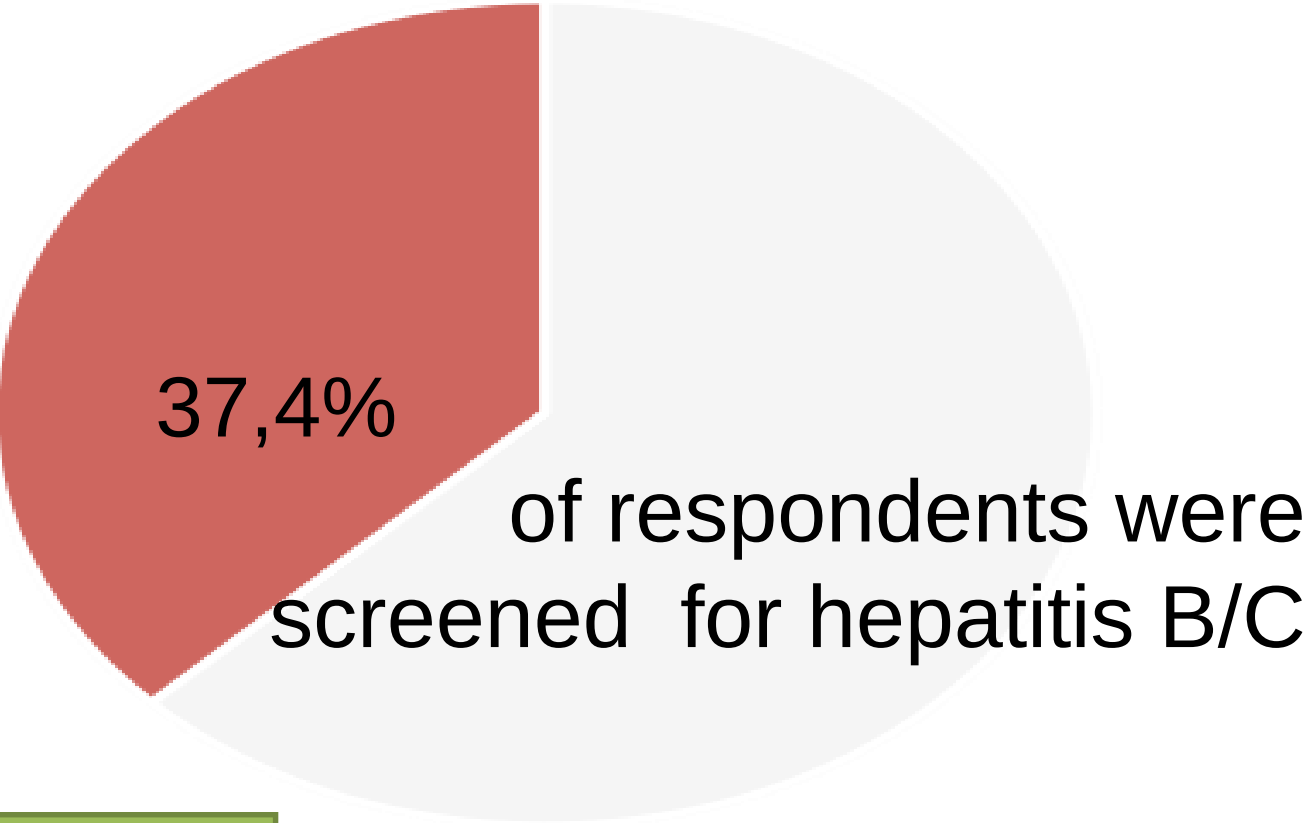
- Blood (transfusions, etc)
- Unsterile syringes or needles
- From the dentist's
- Unprotected sex (heterosexual and homosexual)
- Injecting drug use -IDUs
- Mother to child transmission (either during pregnancy or during delivery)
- Manicure, pedicure, barber's shop
- Body fluids transfer
- Lack of hygiene
- Touch (e.g. Hand shaking)
- Airborne, form one person to another
- Food
- Others
- Doesn't know



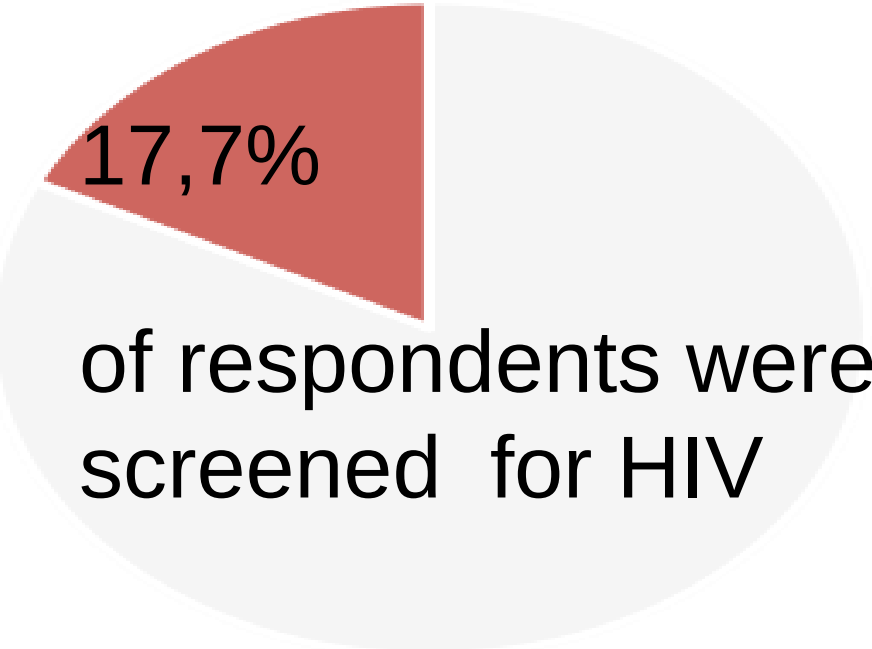
Number of cases: 1005/200 Sample: general population/IDUs

Have you ever went through screening for ?

**General
population**



**General
population**

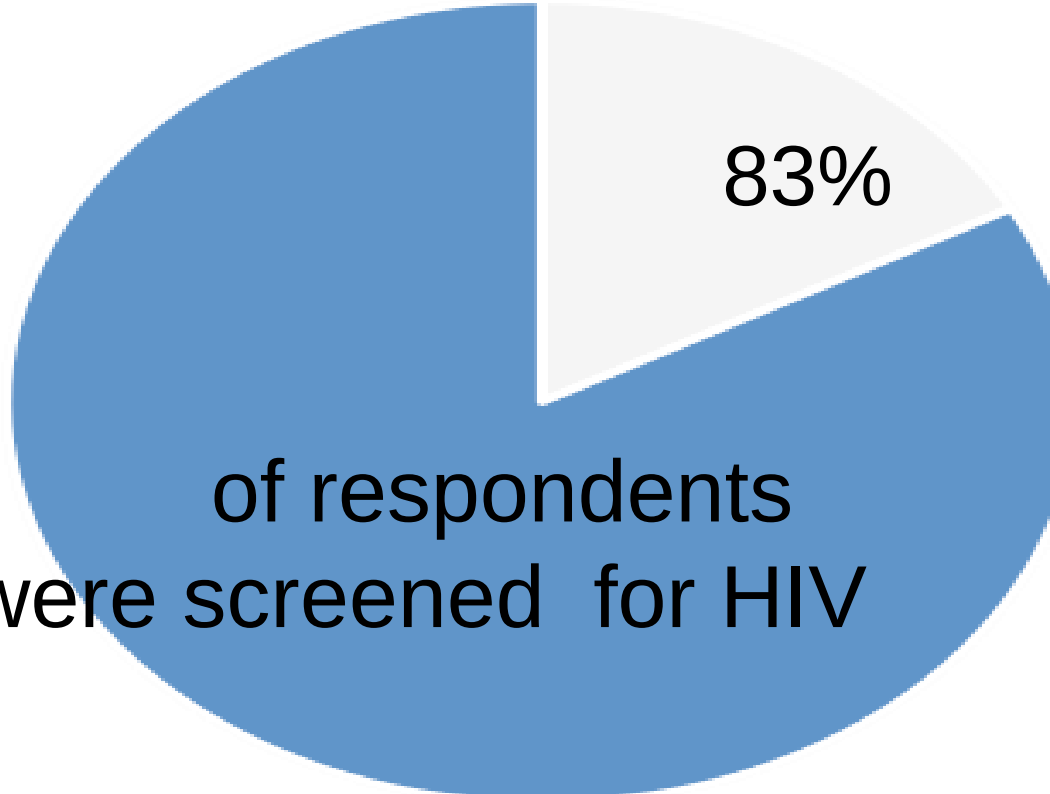
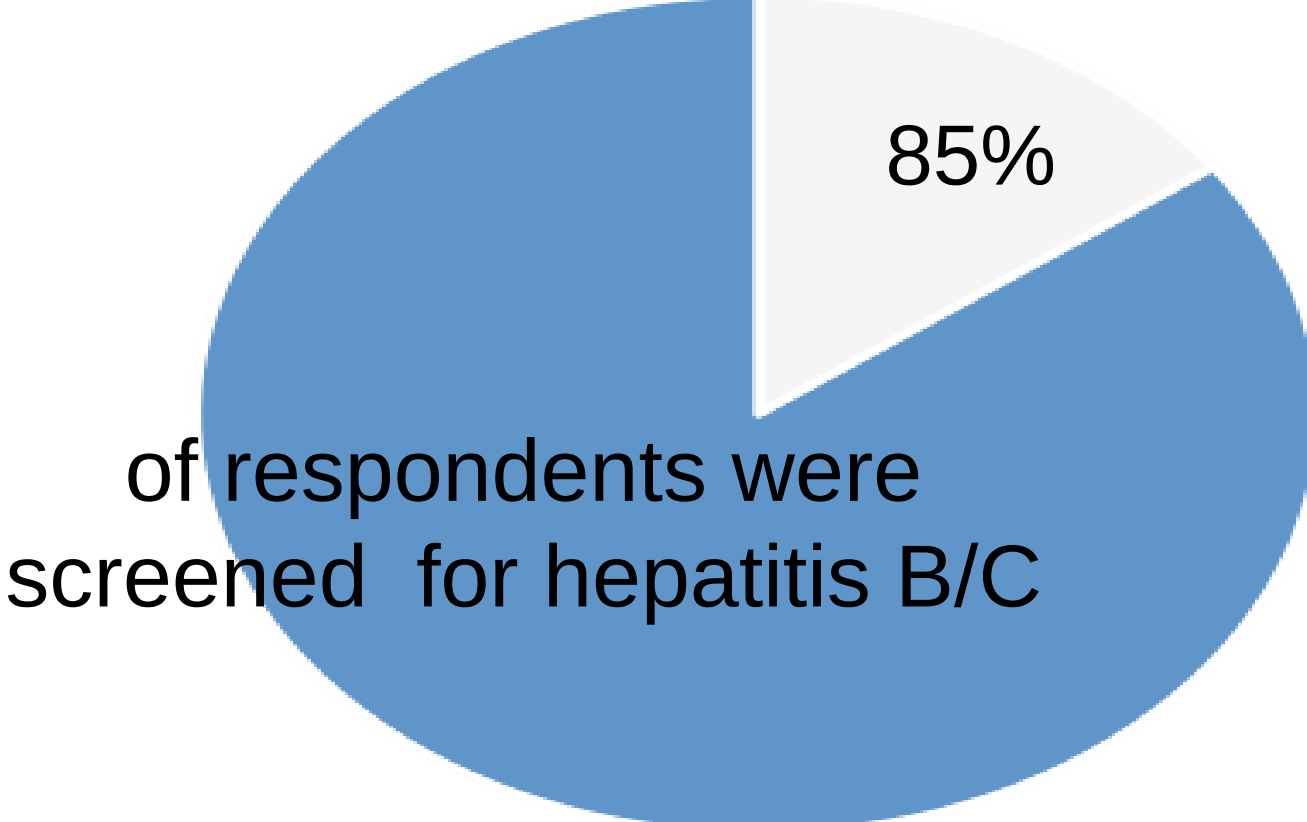


Hepatitis B/C

HIV

IDUs

IDUs



Number of cases: 1005/200 Sample: general population/IDUs

Testing Campaign HCV 2017

- *Final Results* -

OVERVIEW OF TESTING CAMPAIGN

11.713 tested persons:

- 240 persons tested pozitiv (2,0%)

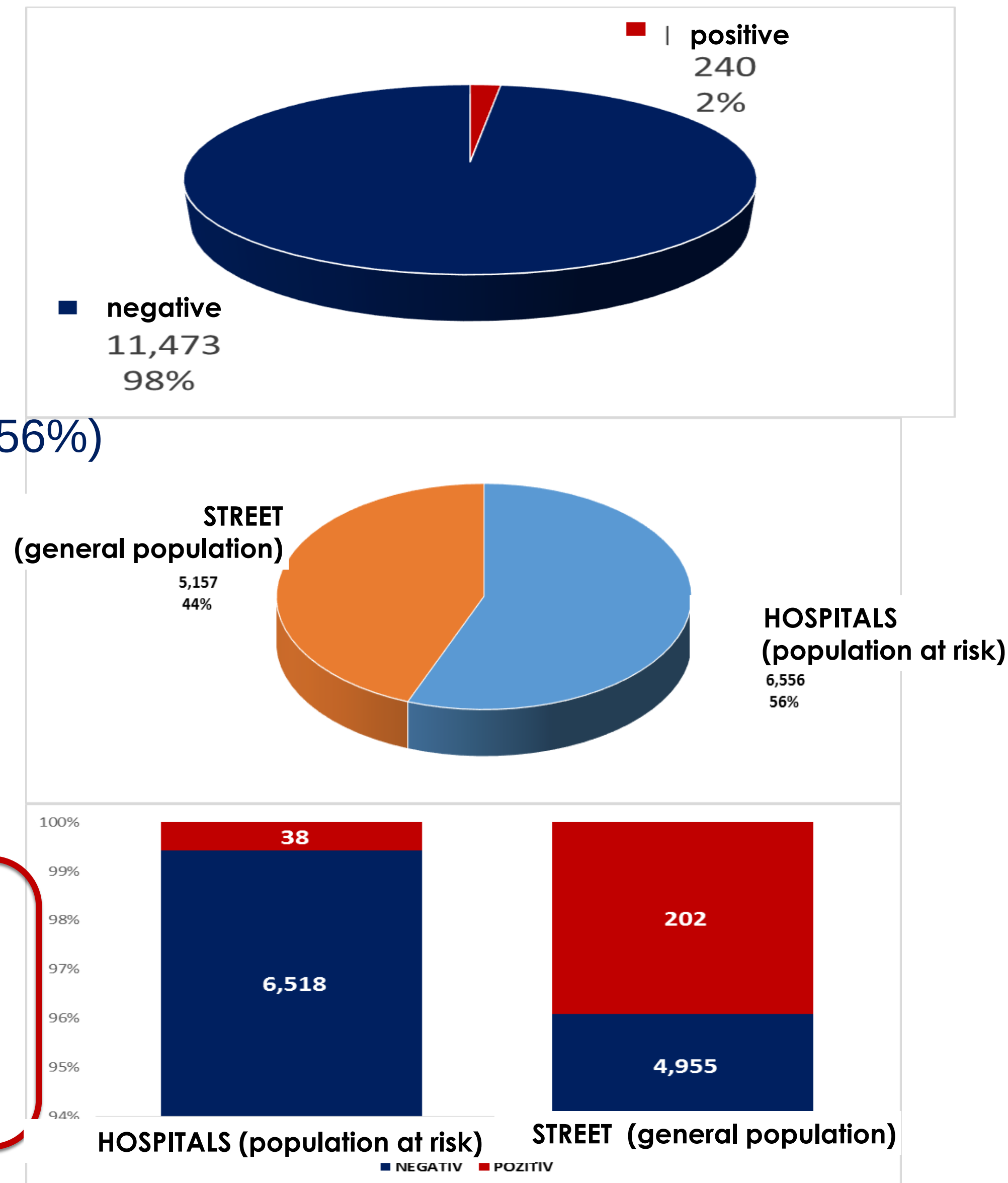
Testing campaigns in multiple locations:

- 6.556 tested in **HOSPITALS PERSONNEL** (population at risk tested) (56%)
 - Bacău, Bihor, București, Cluj, Constanța, Dolj, Galați, Iași, Mureș, Timiș
- 5.157 tests on **STREET Campaign** (general population testing) (44%)
 - Bihor, Botoșani, Brașov, București, Cluj, Constanța, Dolj, Galați, Iași, Mureș, Suceava

Incidence > national average (3,3%) for general population

- 3,9% positive tests (202) during **STREET Campaign**
- 0,6% positive tests (38) during **HOSPITAL PERSONNEL Campaign**

Source: INBIMB



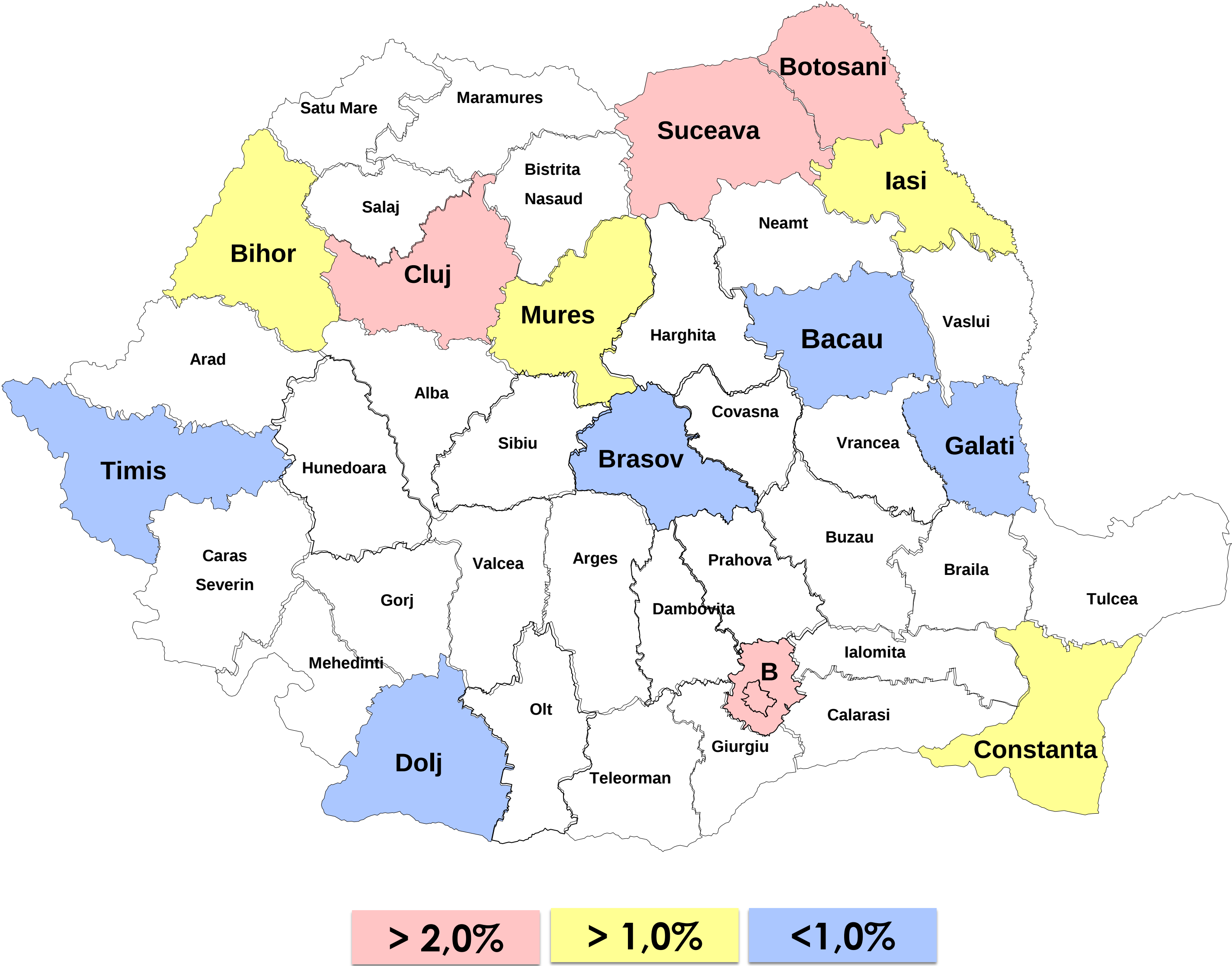
2017 CAMPAIGN OVERVIEW

11.713 tests

- 240 positive tests (2,0%)

	Total tests	Positive Tests	
SUCEAVA	318	16	5,0%
BOTOȘANI	96	3	3,1%
BUCUREȘTI	4,907	140	2,9%
CLUJ	331	7	2,1%
IAȘI	2,636	49	1,9%
BIHOR	216	4	1,9%
CONSTANȚA	610	6	1,0%
MUREȘ	209	2	1,0%
TIMIȘ	1,000	7	0,7%
DOLJ	512	3	0,6%
GALAȚI	487	2	0,4%
BACĂU	318	1	0,3%
BRAȘOV	73	0	0,0%

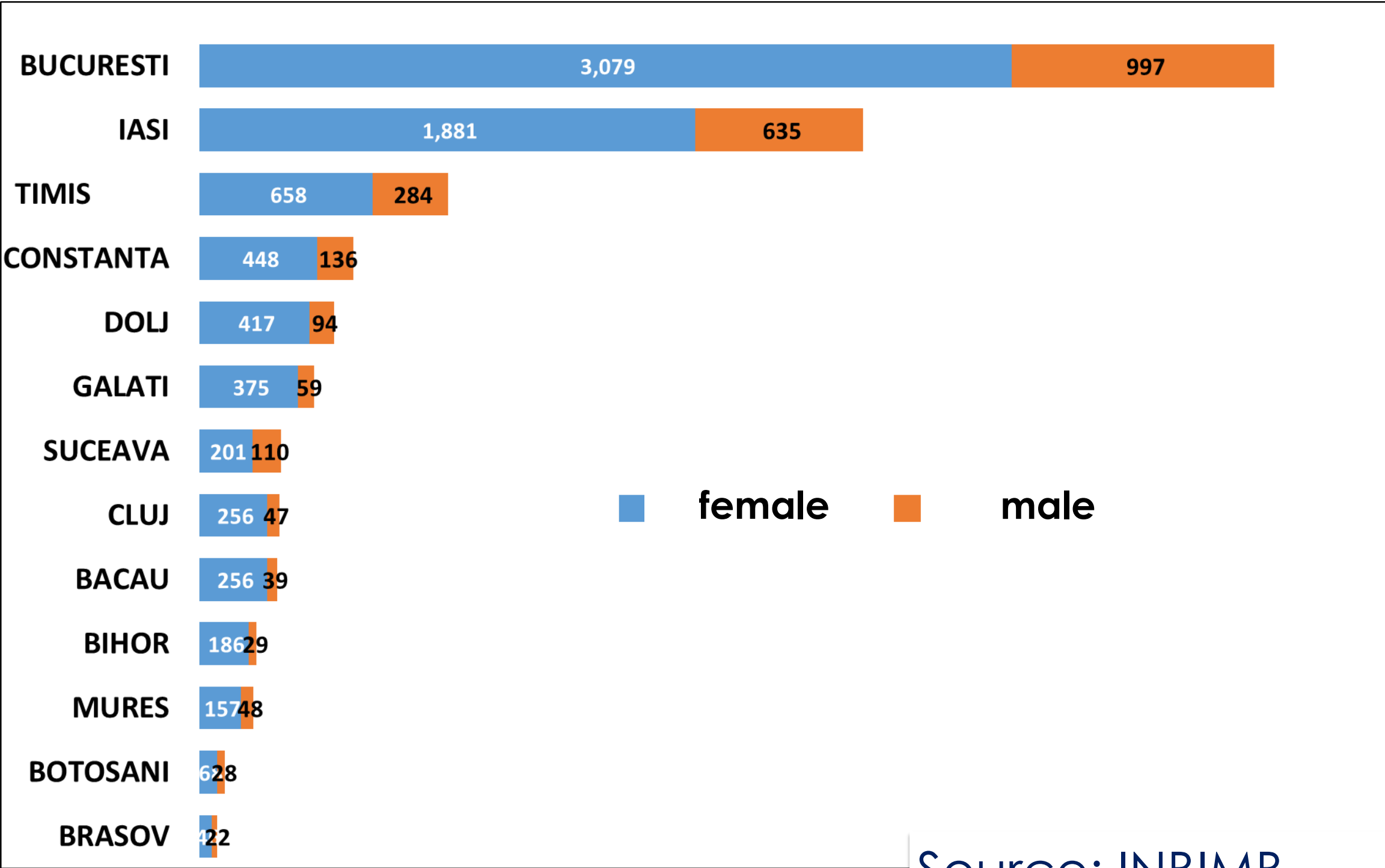
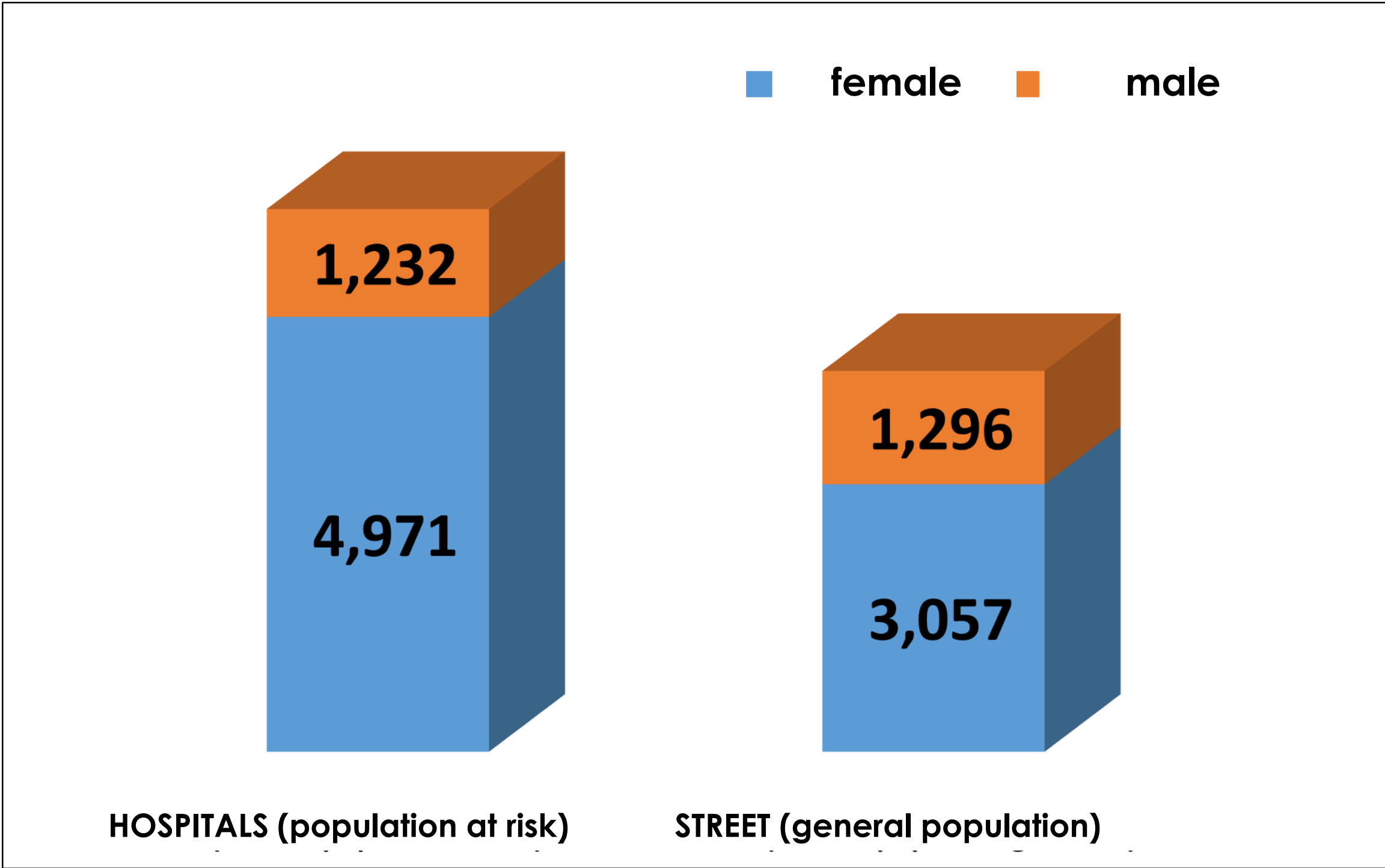
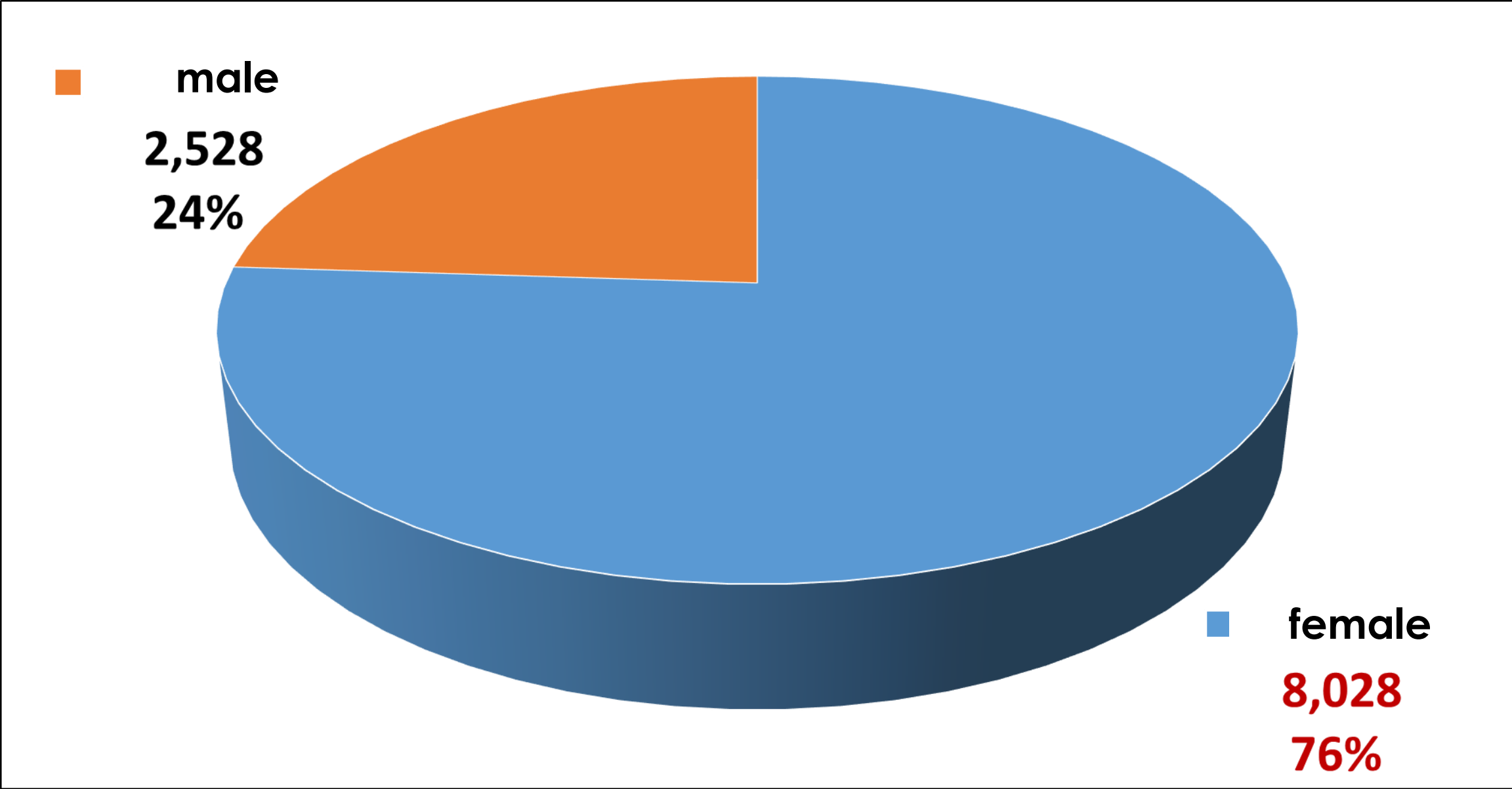
Source: INBIMB



GENDER DISTRIBUTION

11.713 tests => 10.556 valid CNPs

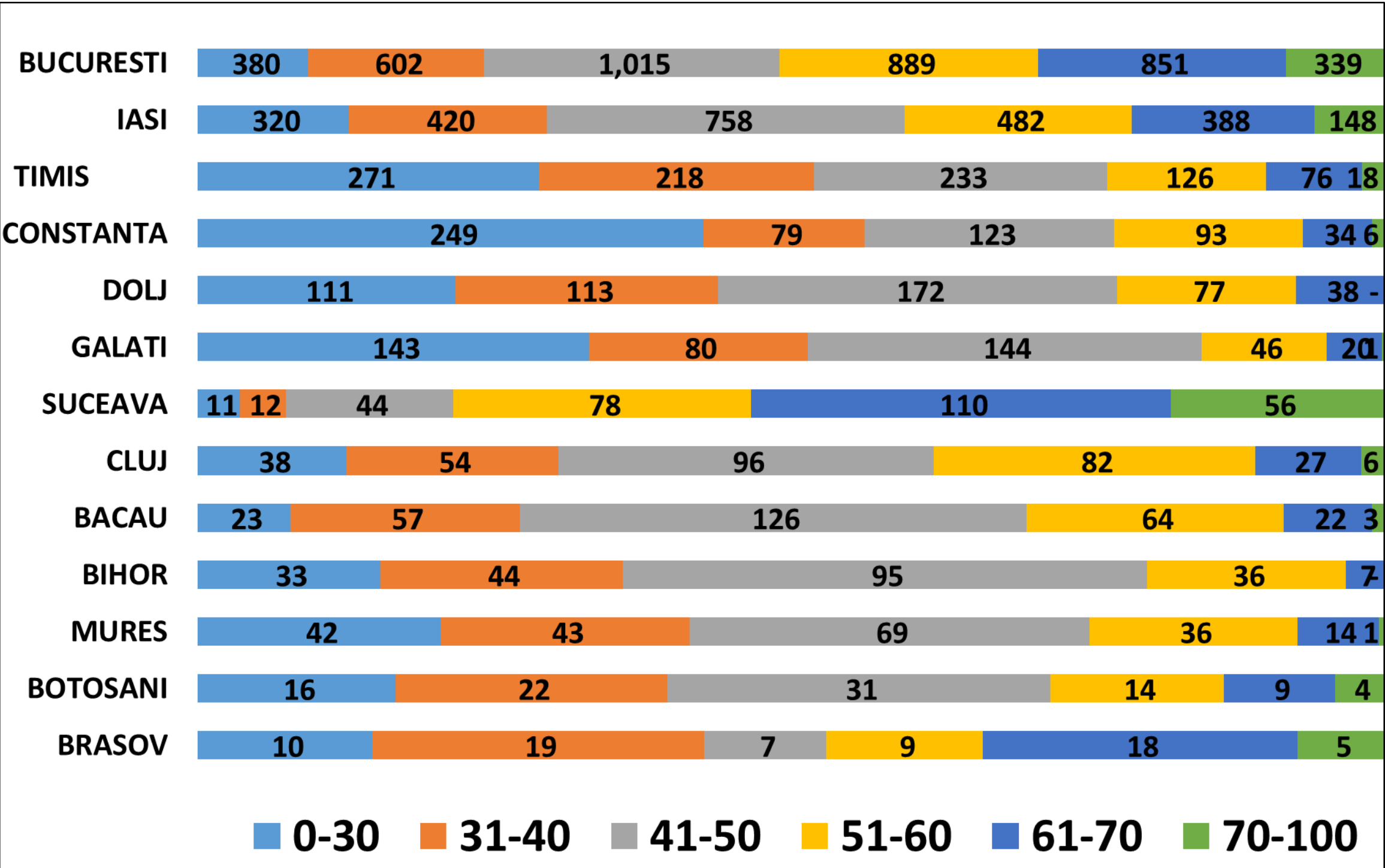
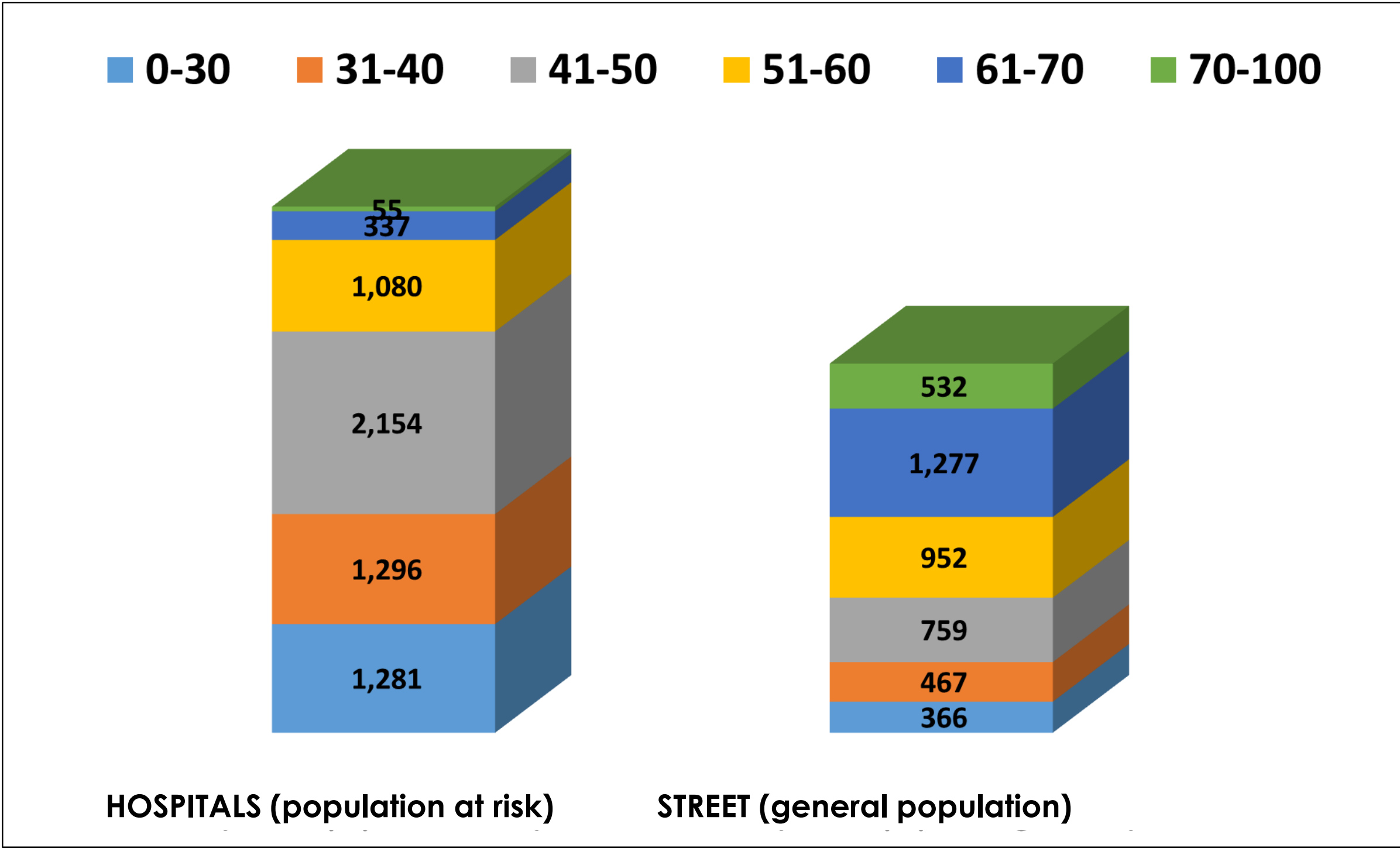
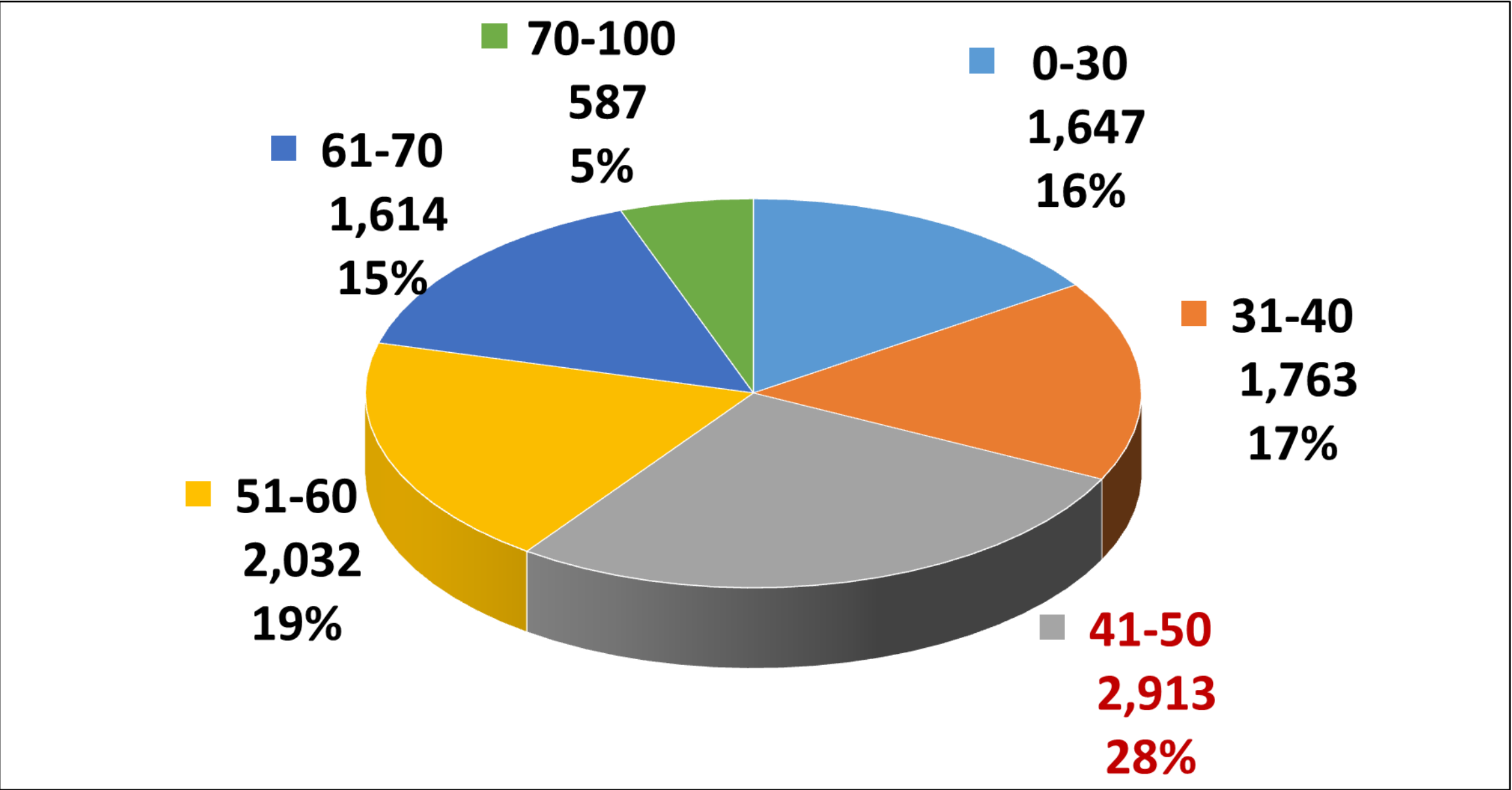
- 8.028 persons female (76%)
- 2.528 persons male (24%)



AGE DISTRIBUTION

11.713 tests=> 10.556 valid CNPs

- 6.708 persons 31-60 (64%)
- 41-50 main segment (2.913 persons ≈ 28%)
- 46 years median age

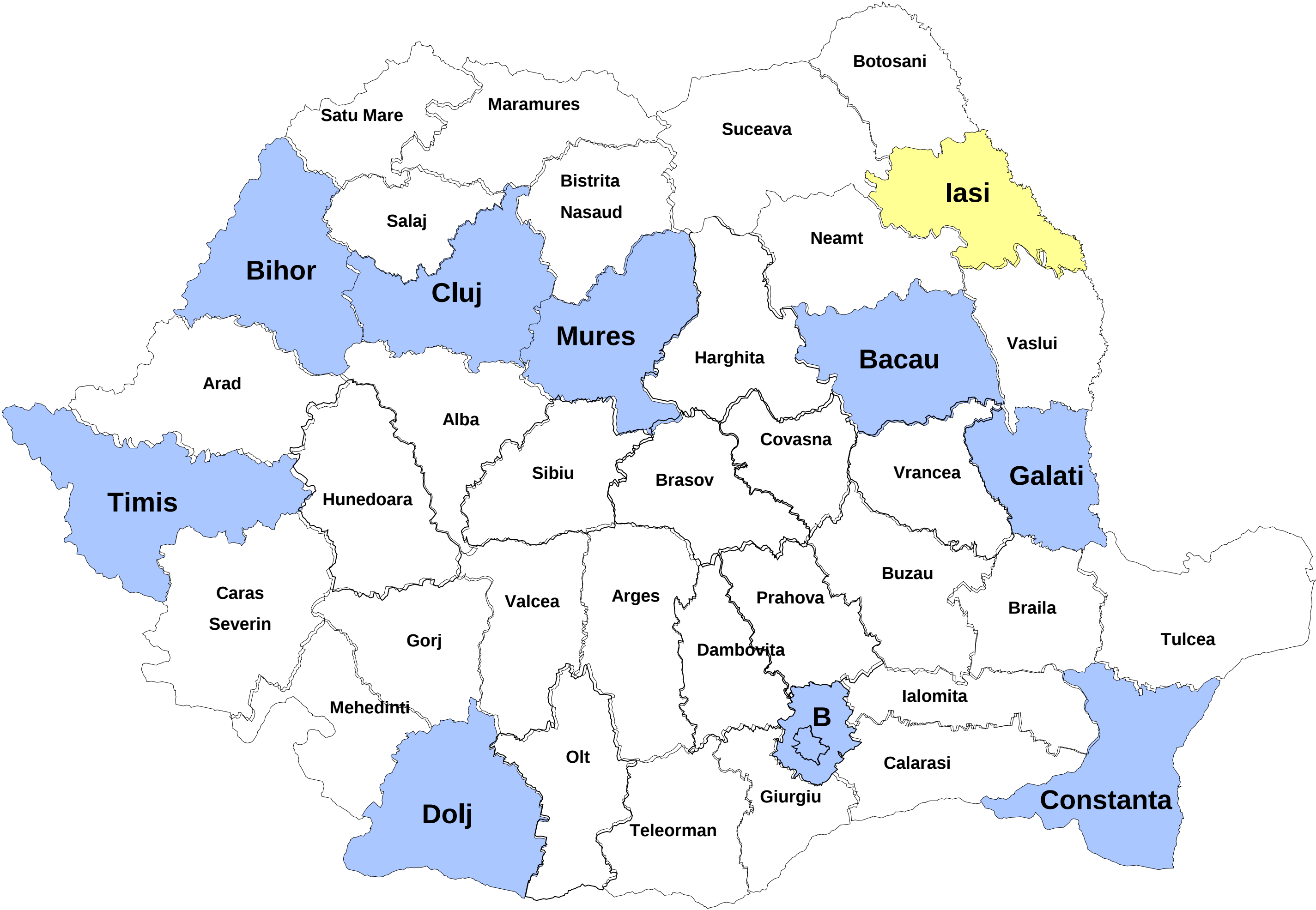


2017 HOSPITALS' PERSONNEL CAMPAIGN RESULTS

6.556 tests

- 38 positive tests (0,6%)

	Total tests	Positive results	
IAȘI	1.451	16	1,1%
TIMIȘ	1.000	7	0,7%
CONSTANȚA	588	4	0,7%
BIHOR	200	1	0,5%
GALAȚI	445	2	0,4%
CLUJ	245	1	0,4%
BUCUREȘTI	1.637	6	0,4%
BACĂU	318	1	0,3%
MUREȘ	184	0	0,0%
DOLJ	488	0	0,0%



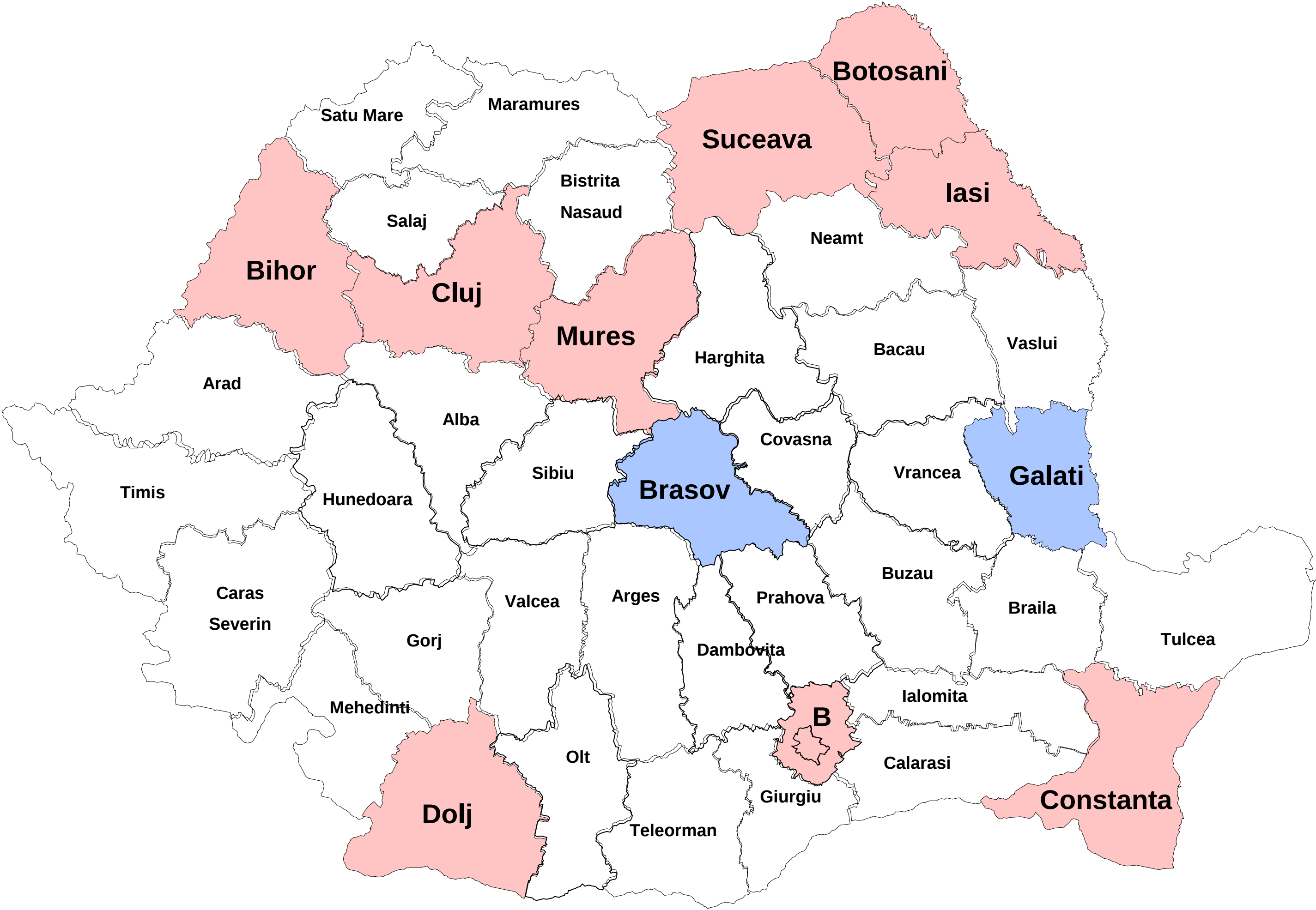
Source: INBIMB

2017 STREET CAMPAIGN RESULTS

5.157 tests

- 202 positive tests (3,9%)

	Total tests	Positive results	
BIHOR	16	3	23,1%
DOLJ	24	3	14,3%
CONSTANȚA	22	2	10,0%
MUREȘ	25	2	8,7%
CLUJ	86	6	7,5%
SUCEAVA	318	16	5,3%
BUCUREȘTI	3270	134	4,3%
BOTOȘANI	96	3	3,2%
IAȘI	1185	33	2,9%
GALAȚI	42	0	0,0%
BRAȘOV	73	0	0,0%



> 2,0%

> 1,0%

<1,0%

2016 – 2018 DAA Treated patients in Romania

- More than 18 000 patients treated with DAA**
- SVR obtained in $\approx 99\%$**

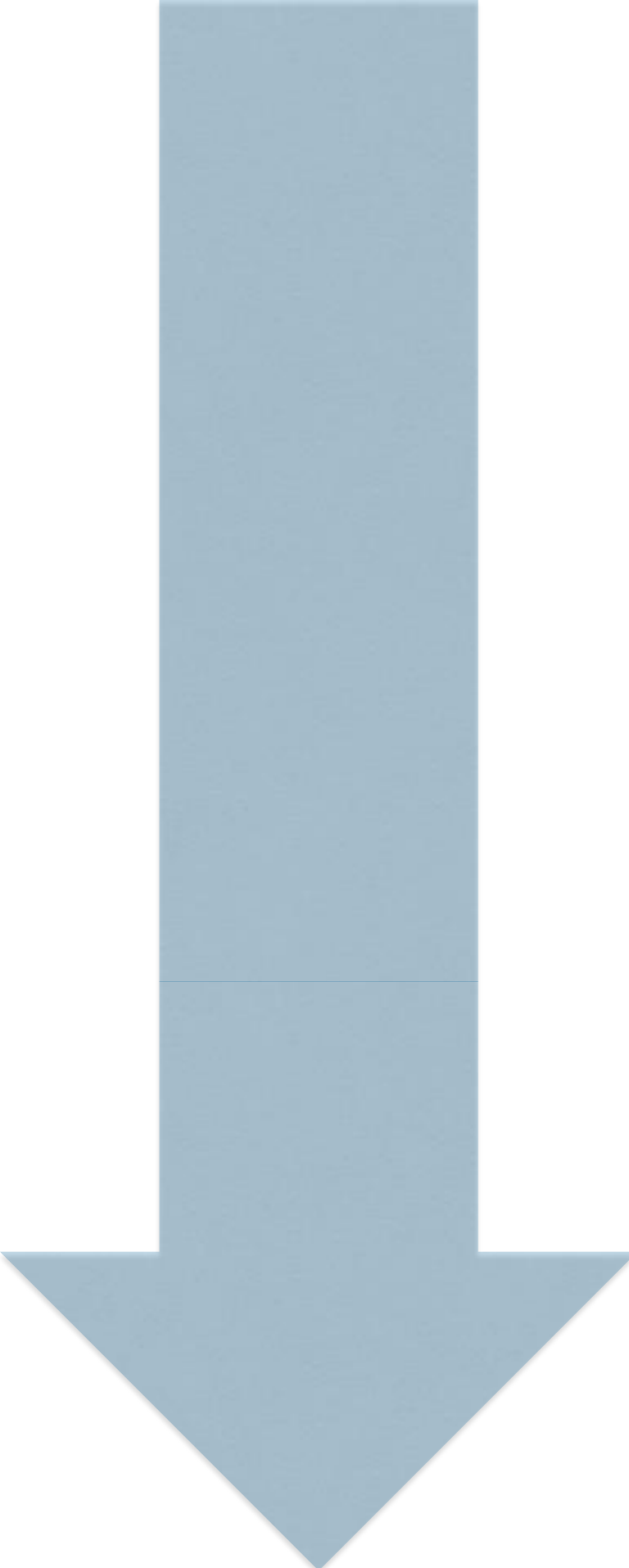
UPDATE OF THE FRAMEWORK CONTRACT 2018-2019 MOH & NATIONAL INSURANCE HOUSE

- **HBsAg and**
- **HCV-ABs lab tests**

should be recommended by GPs for all listed patients

GENERAL PRACTITIONERS, A TURNING POINT IN HCV CONTROL

General Practitioner

- 
- ✓ *Testing*
(HCV Ab and HBsAg testing)
 - ✓ *Patient referral to specialists for diagnosis confirmation and treatment initiation*
 - ✓ *Patient management (including treatment adherence)*



NATIONAL DISEASE REGISTRY, A KEY TOOL



Inregistrare Autentificare
Home Despre Contact

REGISTRUL NAȚIONAL - HEPATITE - HepaReg

Alegeti optiunea dorita:

- 1 NOMENCLATOARE**
Aici se gasesc toate nomenclatoarele aplicatiei. In nomenclatoare sunt salvate valorile predefinite ale anumitor campuri (ex. medici). [Accesati...](#)
- 2 LISTA PACIENTI**
Lista pacientilor dumneavoastra. [Accesati...](#)
- 3 CAUTARE PACIENT**
Daca doriti cautarea sau adaugarea unui pacient. [Accesati...](#)
- 4 PROGRAMARI IN CURS**
Lista programarilor in curs. [Accesati...](#)

Alerte:

Pacienti vizite intarziate:

- Pacient 1
- Pacient 2
- Pacient 3

Vizite astazi:

- Pacient 1
- Pacient 2
- Pacient 3

Customized menu for each user profile
(levels access)

Configured alerts for each user profile/ level

CONCLUSIONS

❖ *Development of National Testing Program*

- HCV testing in early phases of infection,
- Eliminating HCV virus as a foundation of a cost-efficient approach

❖ *Defining of National Prevention Standards*

- **HCV and/or HBV infection can be 100% prevented**
- Action plan at **GP and hospital** level
- General population education

❖ *Development of a free access to treatment policy*

- **Elimination of access to treatment criteria**
- **Applying the principle “first referral, first treated”**