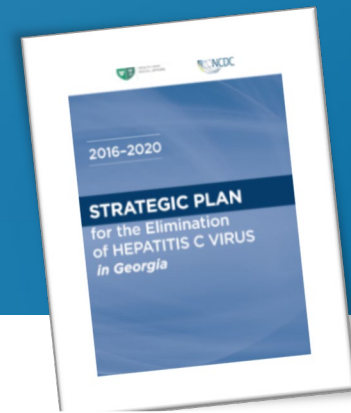


**5<sup>th</sup> HEPATITIS C**  
TECHNICAL ADVISORY  
GROUP  
**TAG Meeting**

**TAG 2018 RECOMMENDATIONS,  
STATUS OF HCV SCREENING:  
SUCSESSES, CHALLENGES, AND  
PLANS TO ADDRESS CHALLENGES**

Amiran Gamkrelidze, MD, PhD, Professor  
National Center for Disease Control and Public Health

# Universal Screening – Road to Elimination



## Goal

Elimination of HCV by ensuring prevention, diagnostics and treatment of the disease

## Targets

**90-95-95**

Target by 2020 –  
**2,8 million** adults screened

Actual by November 2019 – more than  
**1,7 million** adults screened

By 2020

- ✓ **90%** of people living with HCV are diagnosed (**n=135,000**)
- ✓ **95%** of those diagnosed are treated (**n=128,250**)
- ✓ **95%** of those treated are cured (**n=122,000**)

Promote advocacy, awareness and education, and partnerships for HCV associated resource mobilization

Prevent HCV transmission

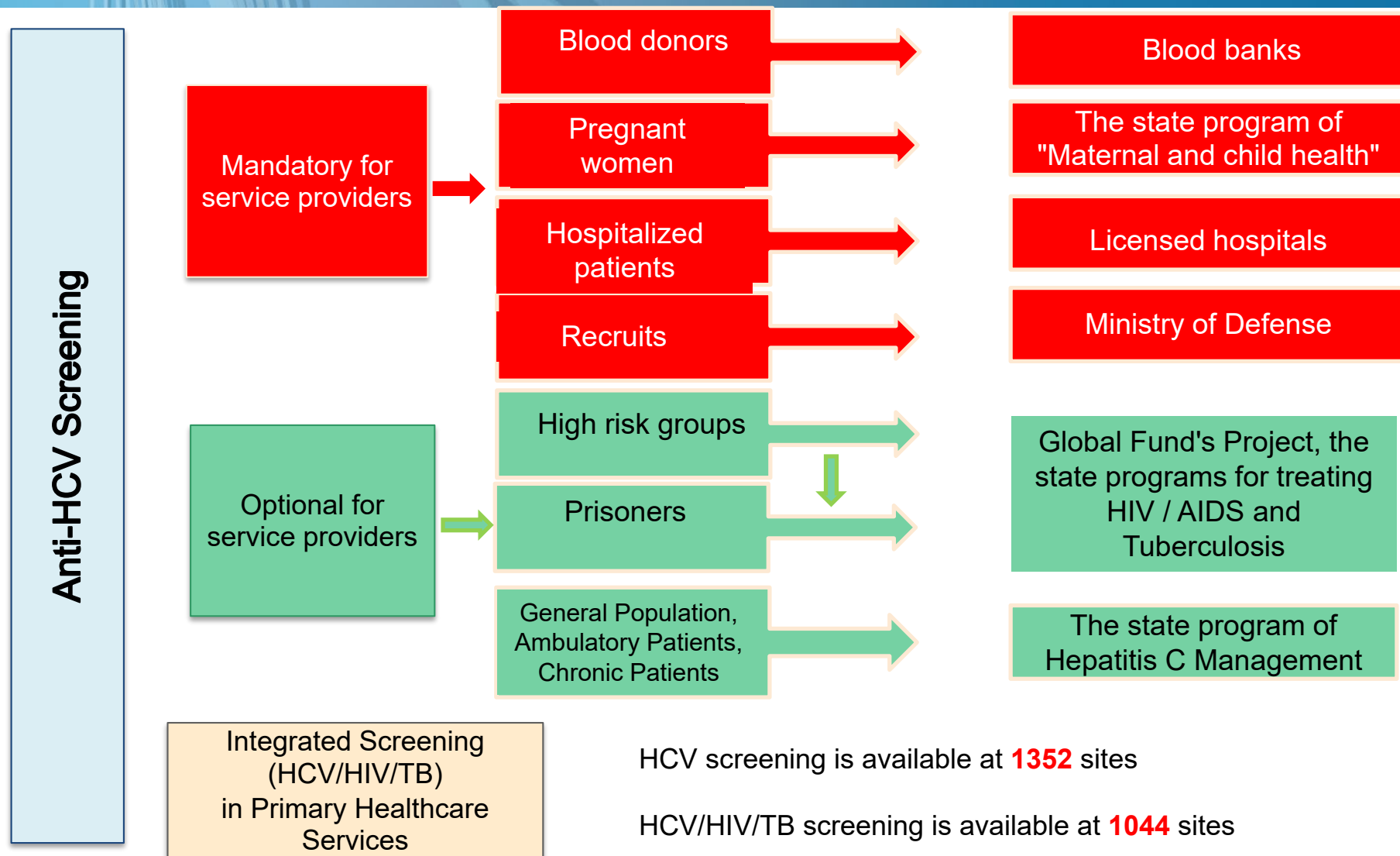
Identify persons infected with HCV

Improve HCV laboratory diagnostics

Provide HCV care and treatment

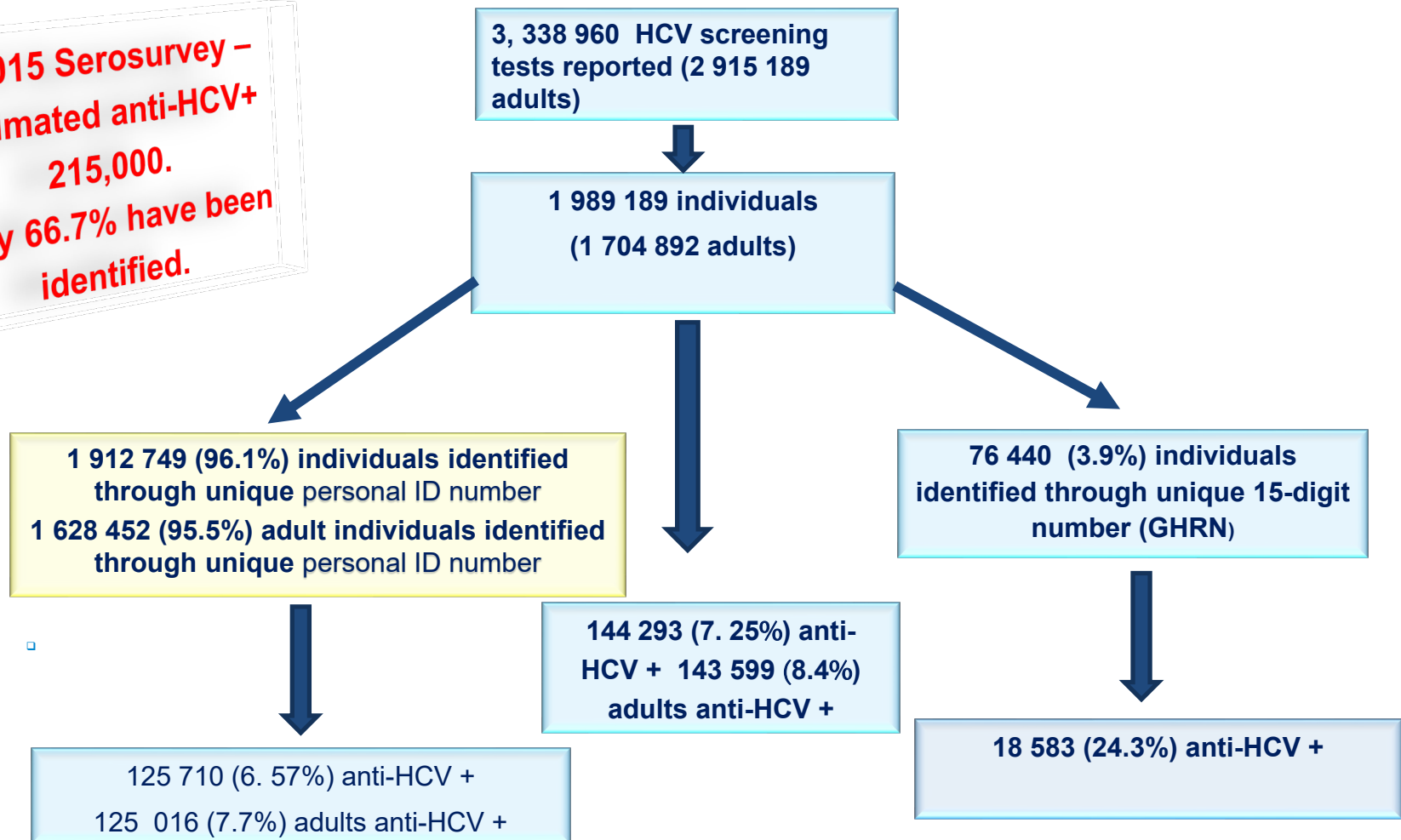
Improve HCV Surveillance

# Screening Groups

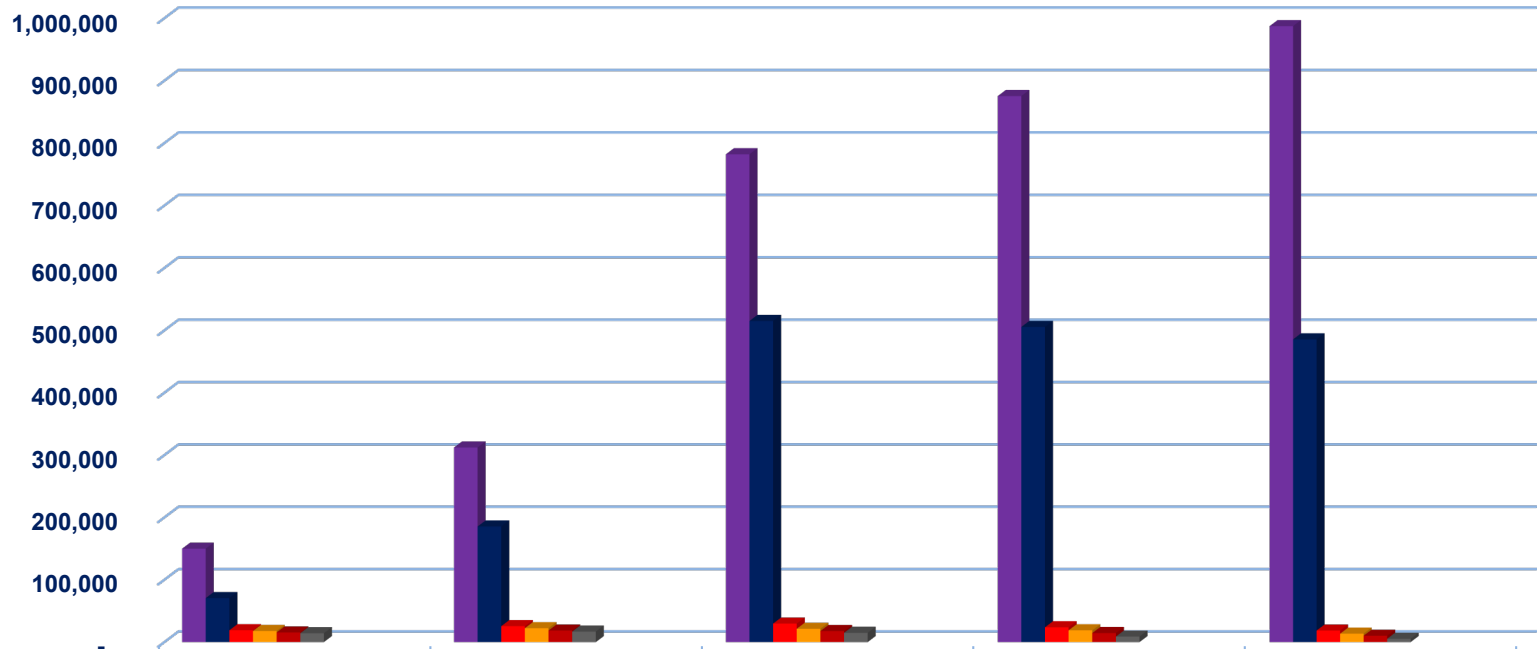


# Screening Results, November 10, 2019

**\* 2015 Serosurvey –  
estimated anti-HCV+  
215,000.  
Only 66.7% have been  
identified.**

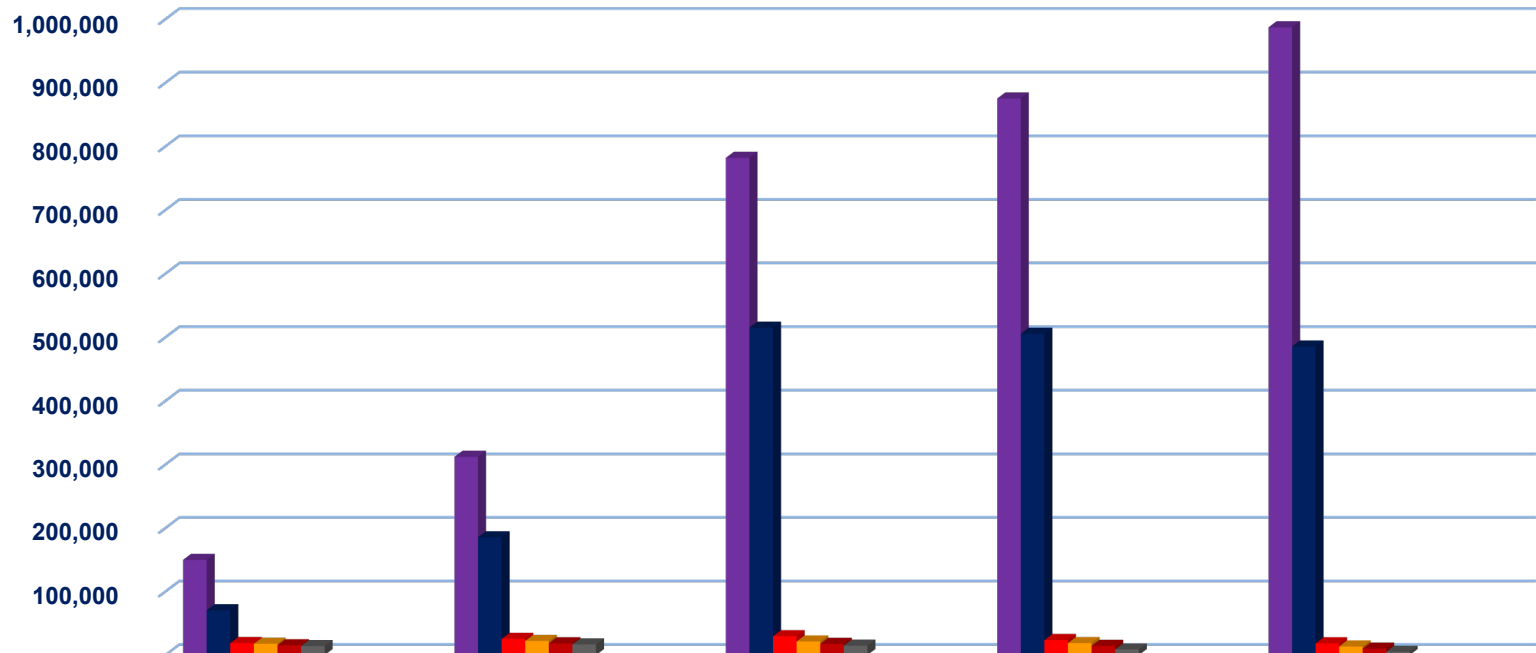


# Number of tests and individuals identified through unique personal ID by anti-HCV positives (2015- Nov. 2019)



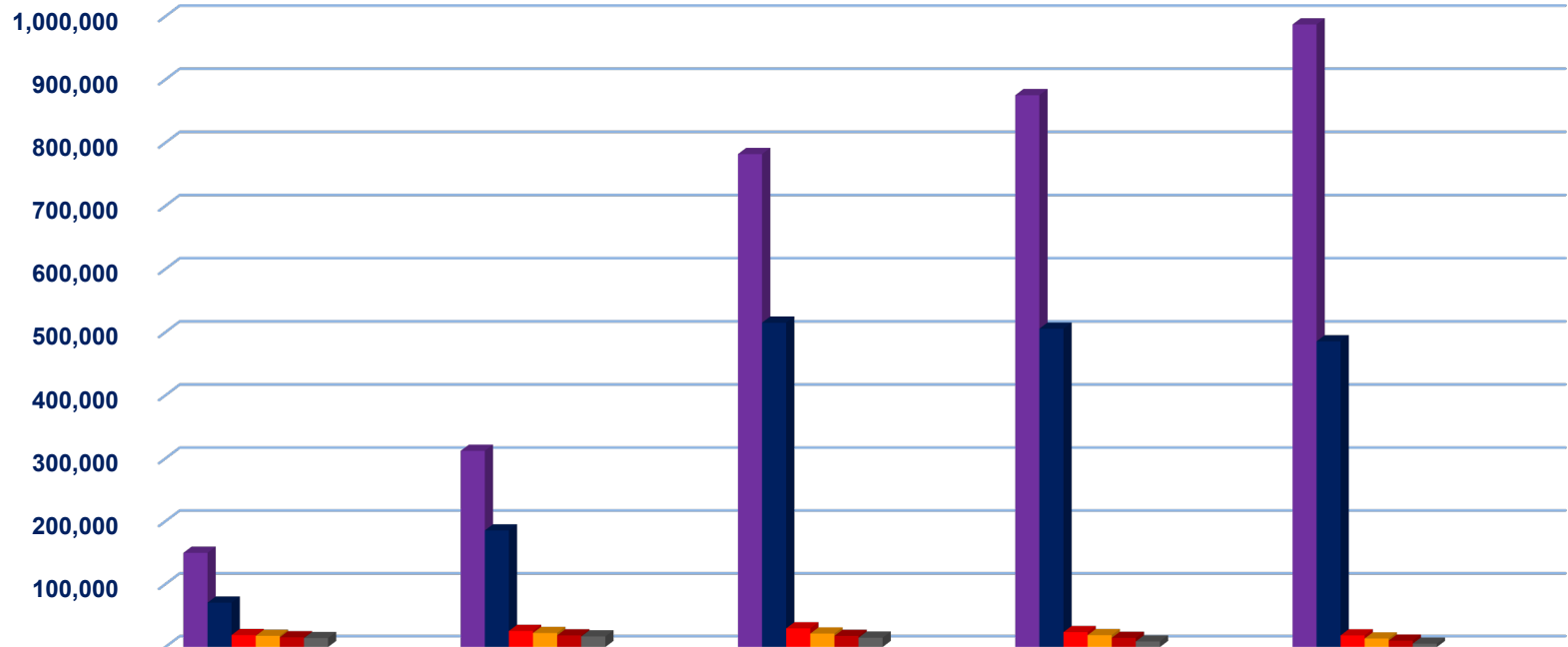
	2015	2016	2017	2018	2019
■ Number of HCV tests	149,856	312,179	782,053	875,320	987,265
■ Unique screening	70,563	185,479	515,137	505,539	485,547
■ anti-HCV+	19,057	25,608	29,700	23,749	18,559
■ Confirmatory test	17,829	22,322	21,413	18,912	13,519
■ Pos. Confirmatory test	15,503	18,558	17,718	14,532	10,173
■ Treatment started	14,256	16,832	14,877	8,900	5,280
% of unique screening	47.1%	59.4%	65.9%	57.8%	49.2%
% of anti-HCV+	27.0%	13.8%	5.8%	4.7%	3.8%
% of confirmatory test	93.6%	87.2%	72.1%	79.6%	72.8%
% of persons started treatment	92.0%	90.7%	84.0%	61.2%	51.9%

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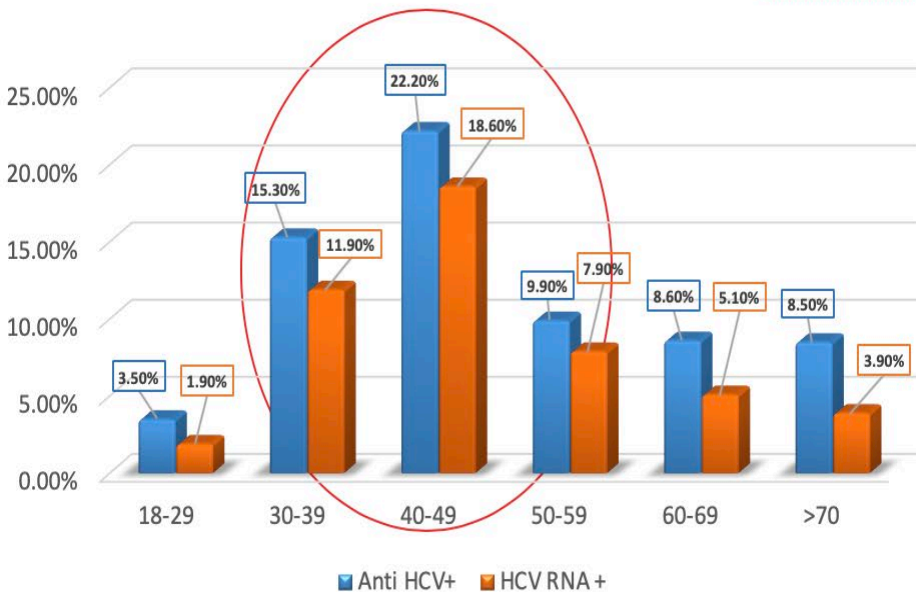
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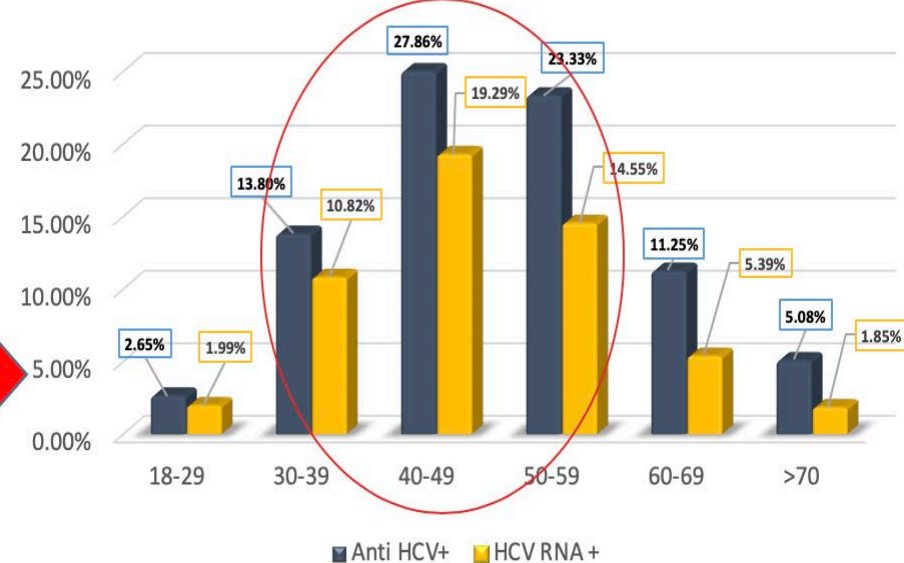
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# HCV Seroprevalence Survey vs. Screening Data

HCV Prevalence by Age Group (Men)- Serosurvey



HCV Prevalence by Age Group (Men)- Screening Results

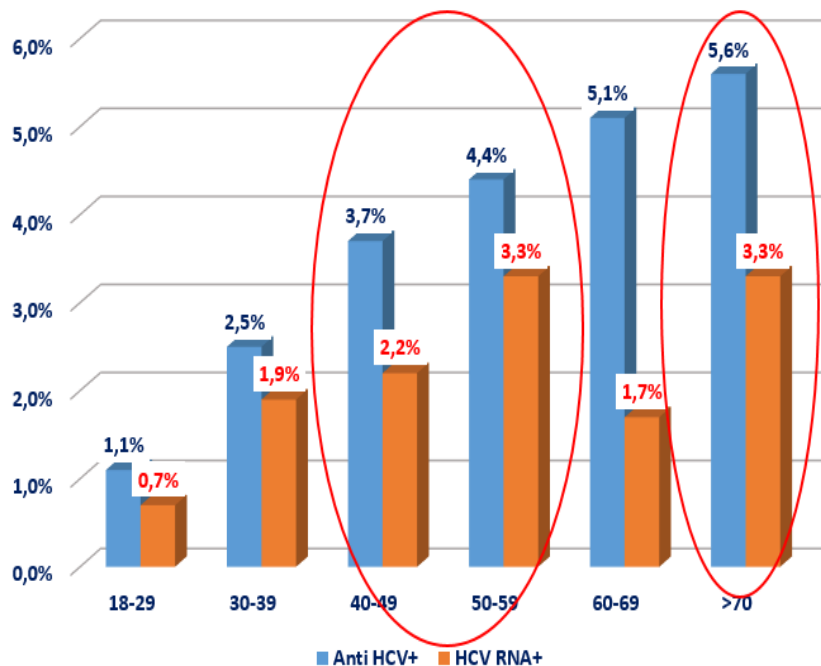


**IDU and Blood transfusion - Most Common Risk factors**

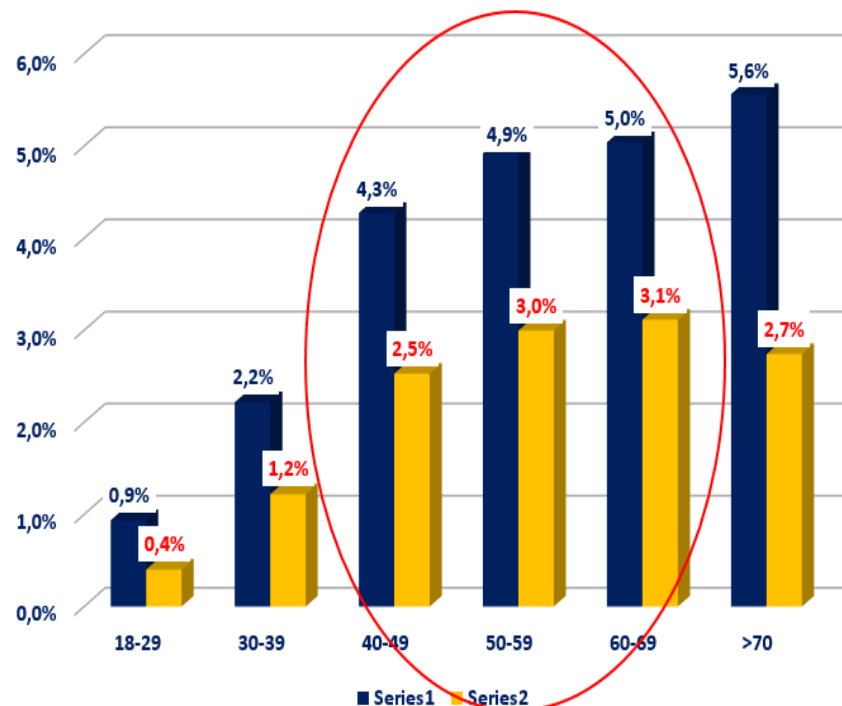


# HCV Seroprevalence Survey vs. Screening Data

HCV Seroprevalence by Age Group (Women)- Serosurvey



HCV Seroprevalence by Age Group (Women)- Screening Result



# Number of HCV tests among PWIDs by years



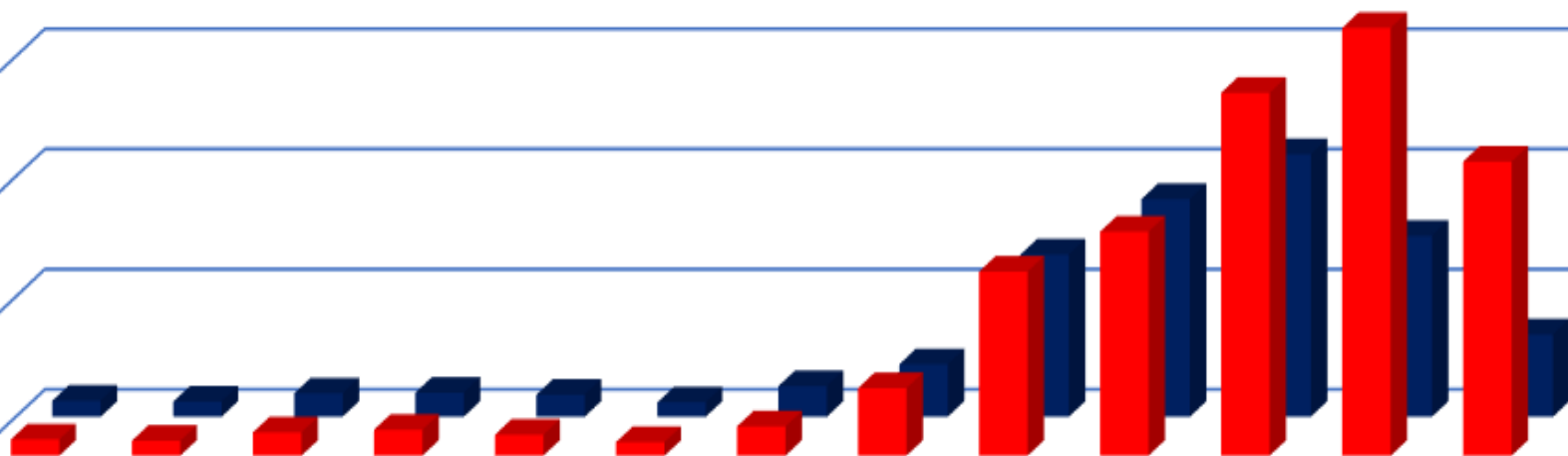
14 Harm  
Reduction  
Centers



6  
Mobile  
Units



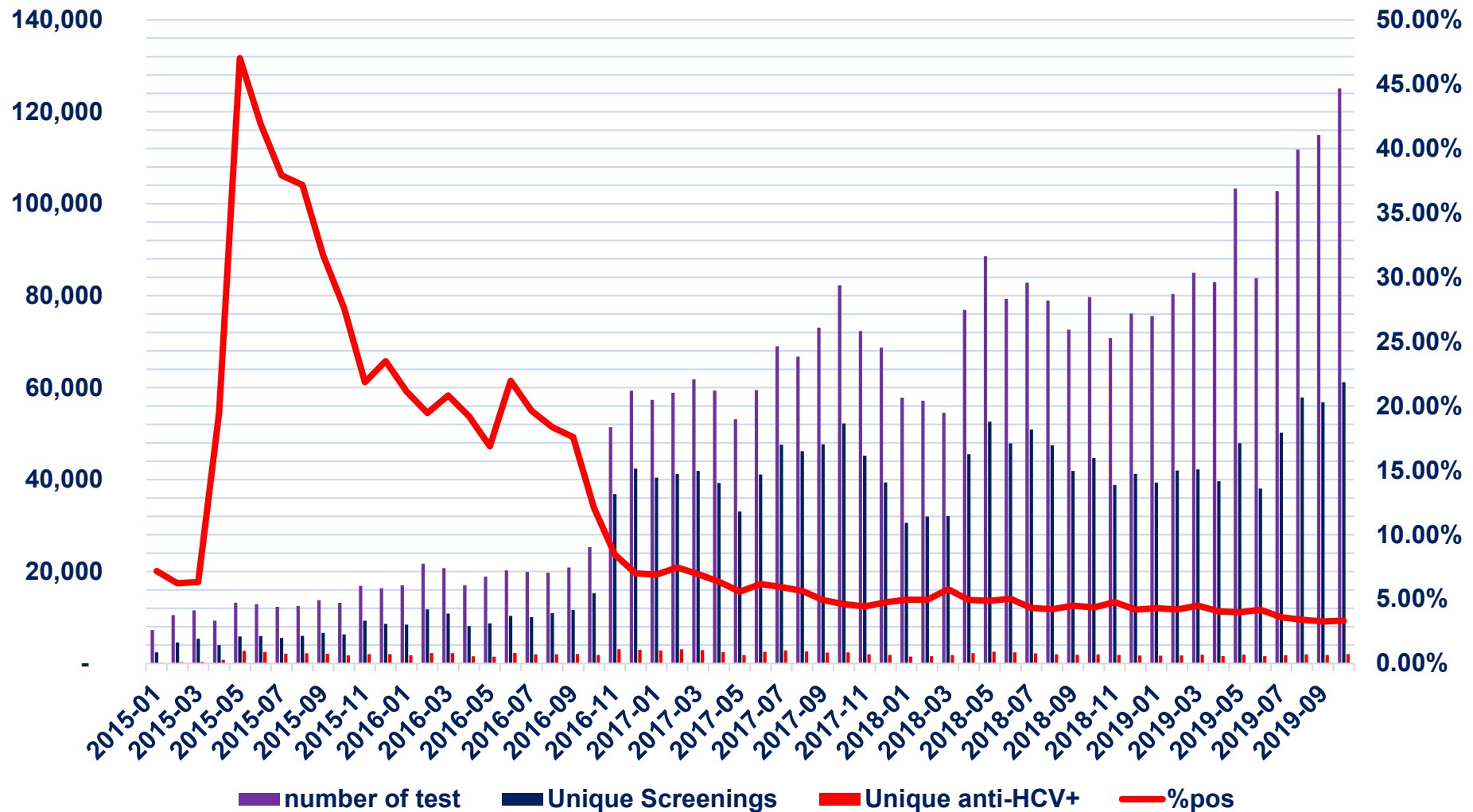
>80 Harm  
Reduction  
Workers



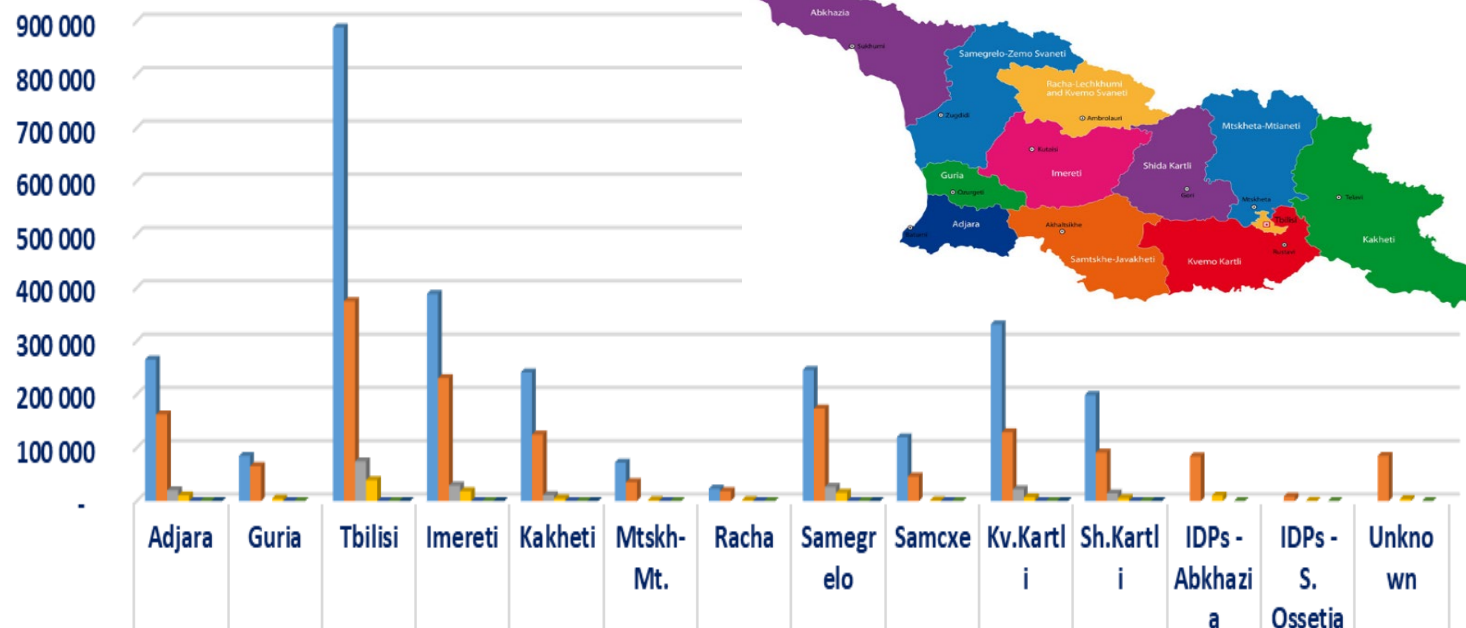
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
%	49,0%	57,0%	50,0%	48,0%	51,0%	51,0%	51,0%	53,0%	47,0%	49,0%	41,0%	30,0%	24,0%
■ negative	680	628	969	1 078	873	566	1 221	2 816	7 660	9 326	15 101	17 802	12 239
■ positive	663,0	627,0	969,0	999,0	915,0	600,0	1276,0	2182,0	6750,0	9055,0	10924,0	7526,0	3423,0

Source:  
GHRN  
Data

# Number of screening tests, unique person and anti-HCV + results by month, January 2015 – November 2019

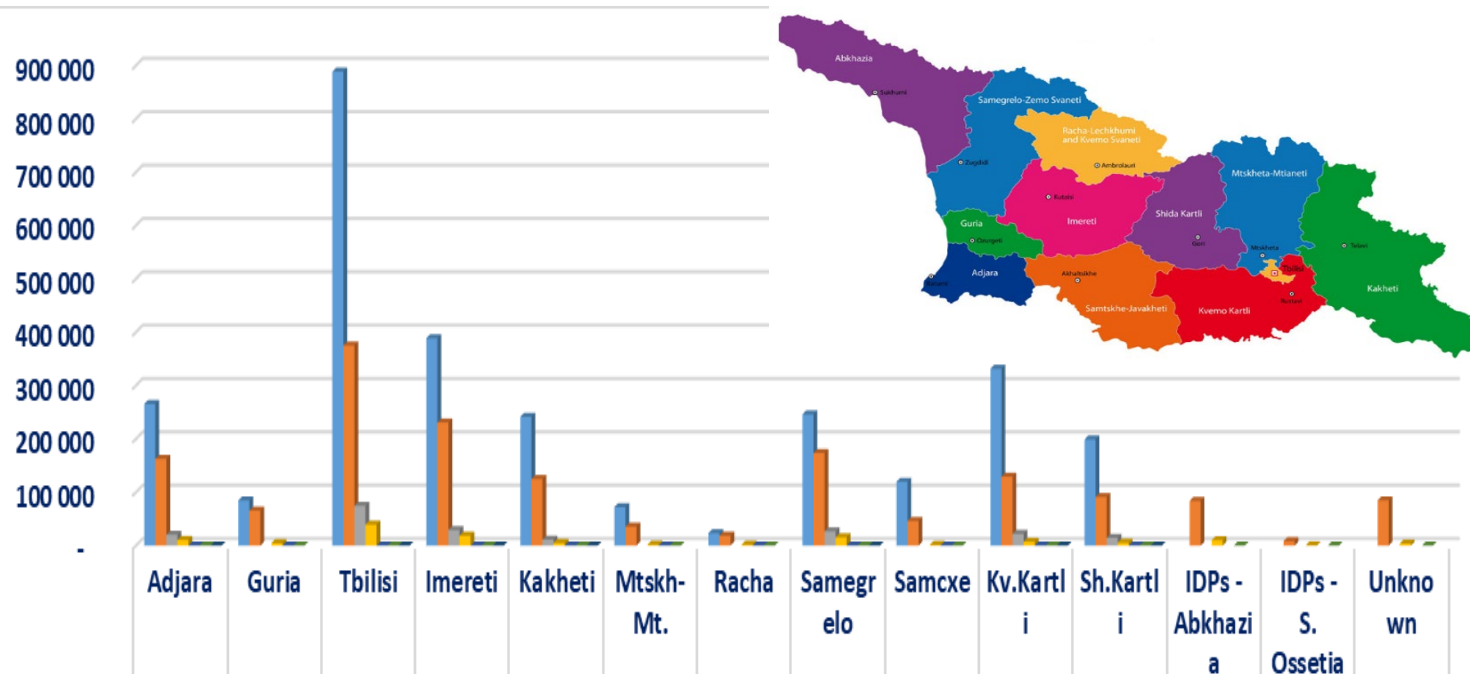


# Number of screened unique adult persons identified through personal ID by region – November 10, 2019



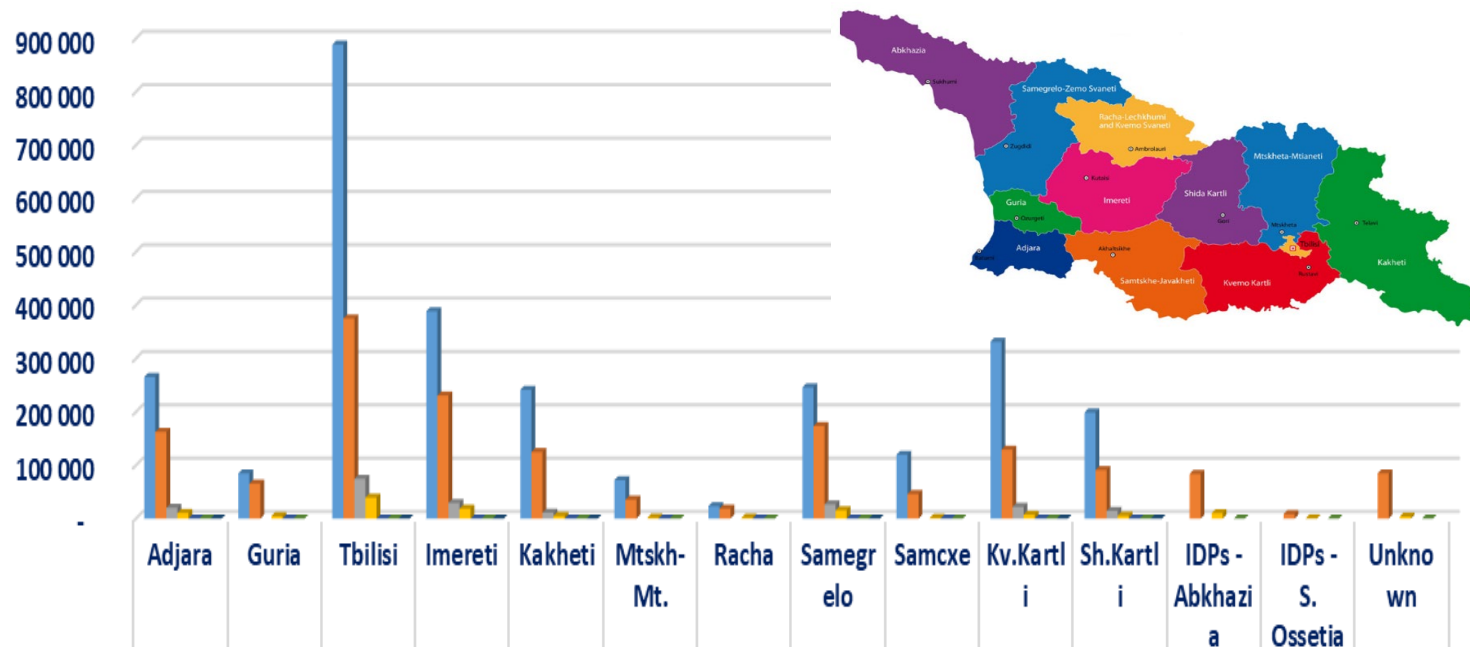
■ Number of adult	265 515	84 723	888 400	388 727	241 287	71 995	23 155	245 964	119 532	331 453	198 811			
■ Screened	162 380	65 399	375 137	230 485	124 749	35 469	18 439	173 325	46 219	129 053	90 830	83 708	8 459	84 800
■ Number anti-HCV+ by survey 2015	20 179		74 626	29 155	10 858			26 810		21 876	14 513			
■ anti-HCV+	10 358	4 629	39 285	18 416	5 024	1 834	1 577	15 716	1 347	7 157	5 423	10 207	388	3 655
■ %coverage	61,2%	77,2%	42,2%	59,3%	51,7%	49,3%	79,6%	70,5%	38,7%	38,9%	45,7%			
■ %anti HCV+	6,4%	7,1%	10,5%	8,0%	4,0%	5,2%	8,6%	9,1%	2,9%	5,5%	6,0%	12,2%	4,6%	4,3%
■ % ident. Pers. with positive antibodies	51,3%		52,6%	63,2%	46,3%			58,6%		32,7%	37,4%			

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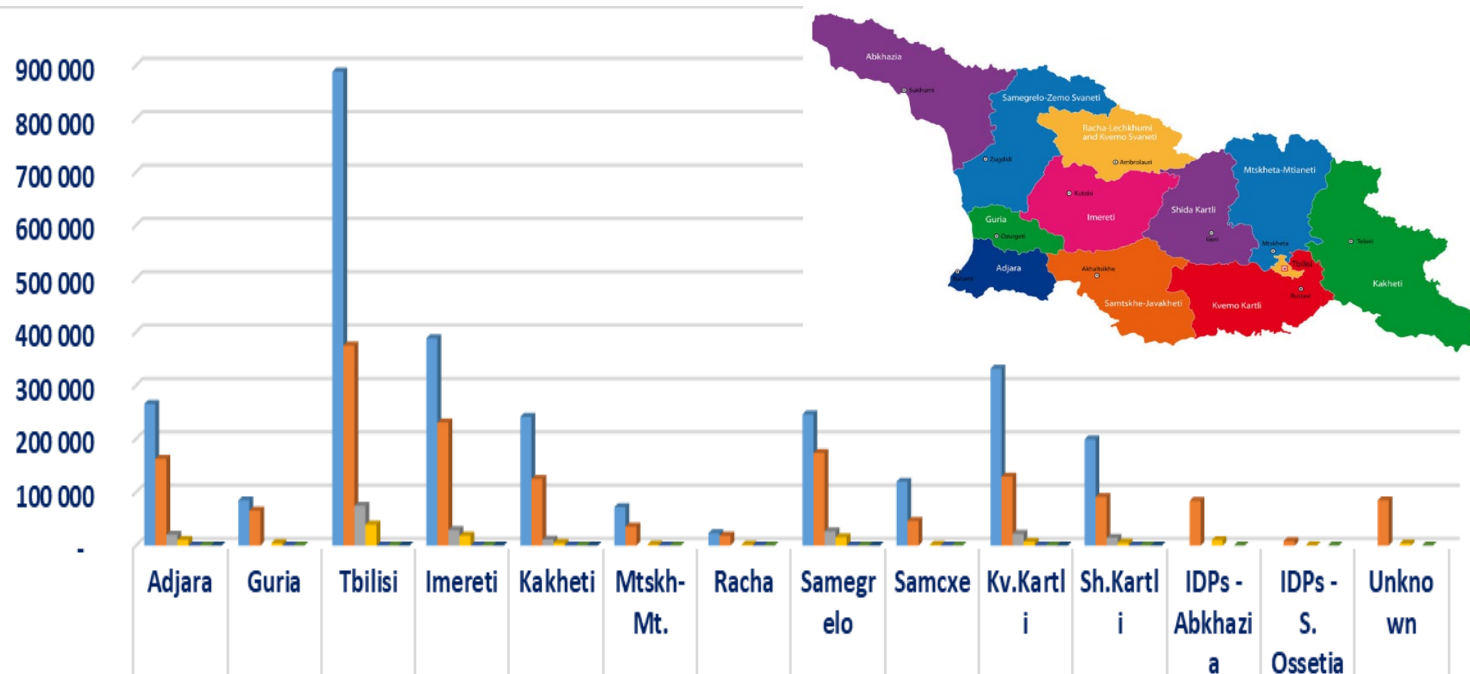
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	Adjara	Guria	Tbilisi	Imereti	Kakheti	Mtskh-Mt.	Racha	Samegr elo	Samcxe	Kv.Kartli	Sh.Kartli	IDPs - Abkhaz a	IDPs - S. Ossetia	Unkno wn
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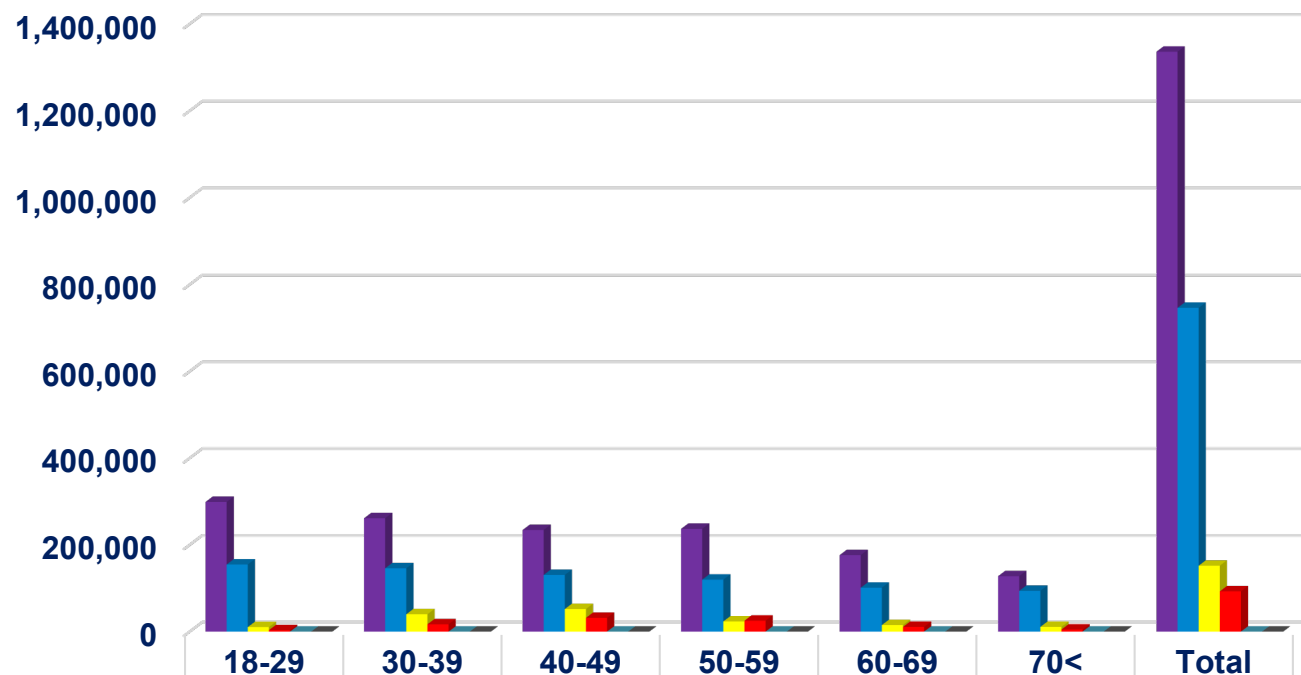


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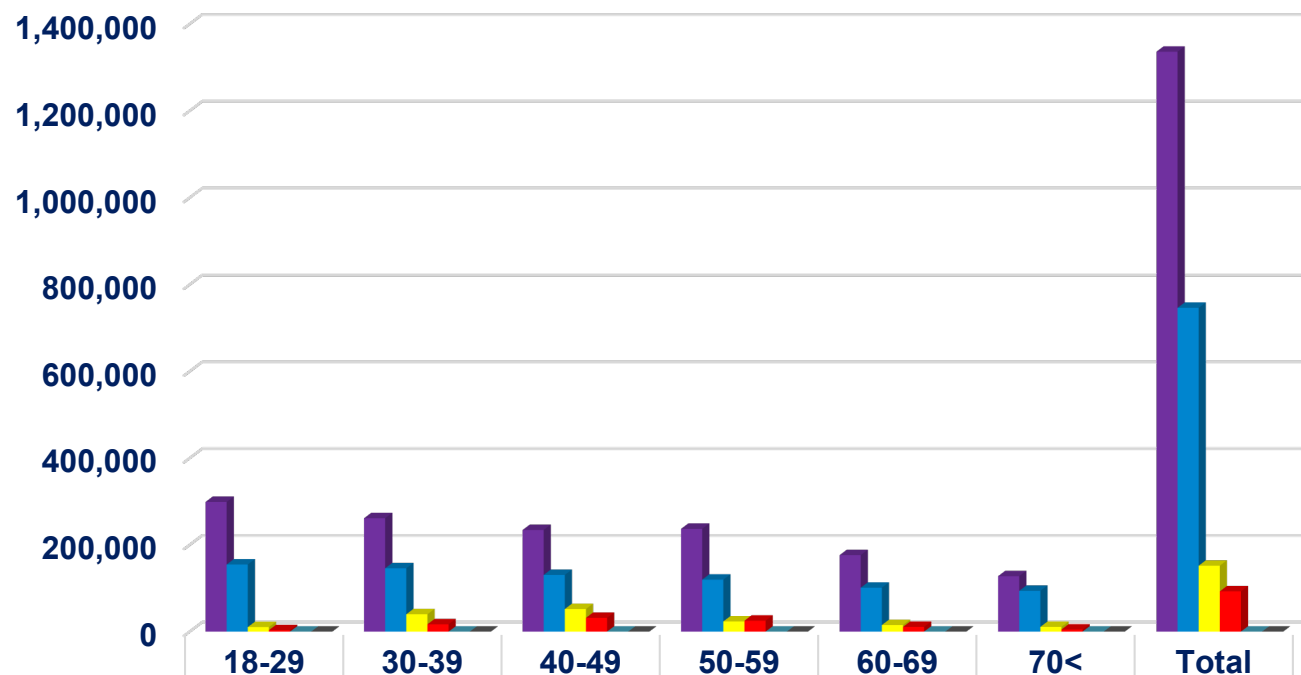
# Number of HCV screening in male population, including Antibody detection rate by age group



Target	18-29	30-39	40-49	50-59	60-69	70<	Total
	299,061	261,520	234,335	236,989	176,342	127,838	1,336,085
Screened	154,735	146,037	130,686	119,778	101,200	94,061	746,497
Target of antibody positive by survey 2015	10,467	40,013	52,022	23,462	15,165	10,866	151,995
anti-HCV+ by screening	3,381	16,892	31,719	25,206	10,871	4,761	92,830
Covering by screening of HCV %	51.7%	55.8%	55.8%	50.5%	57.4%	73.6%	55.9%
Number of identified persons with anti HCV+	32.3%	42.2%	61.0%	107.4%	71.7%	43.8%	61.1%

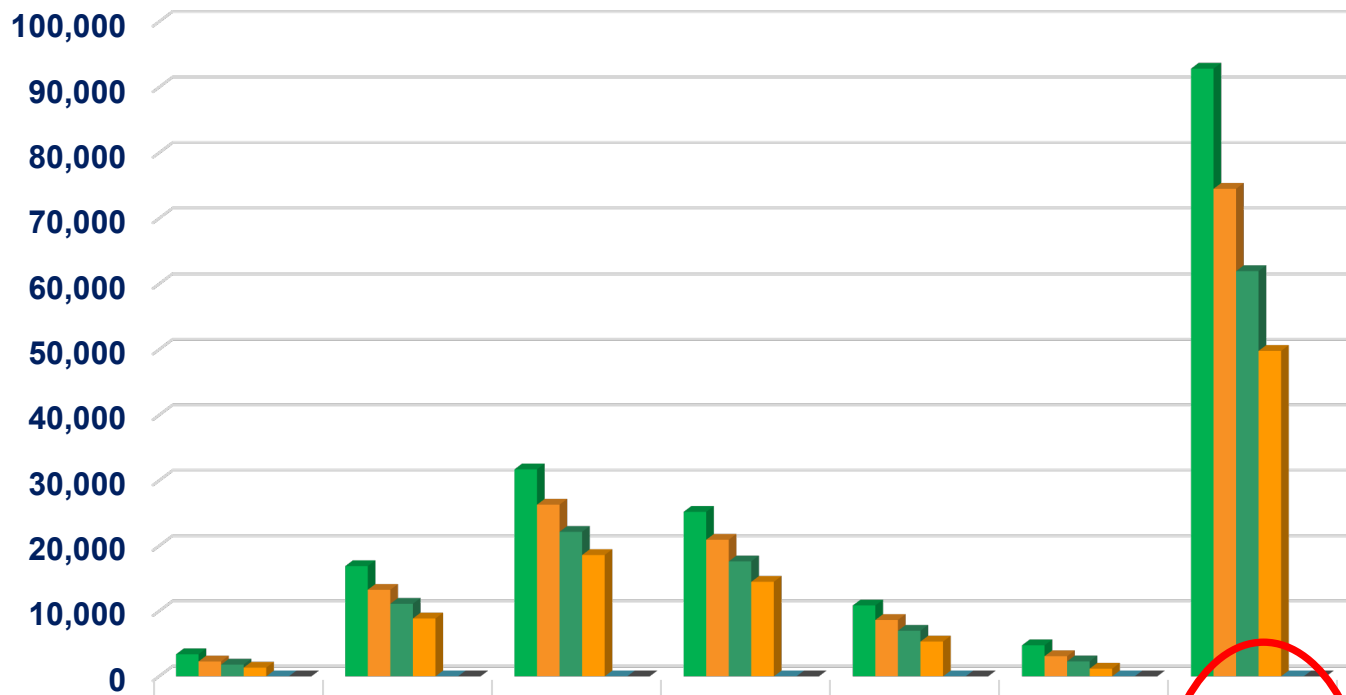


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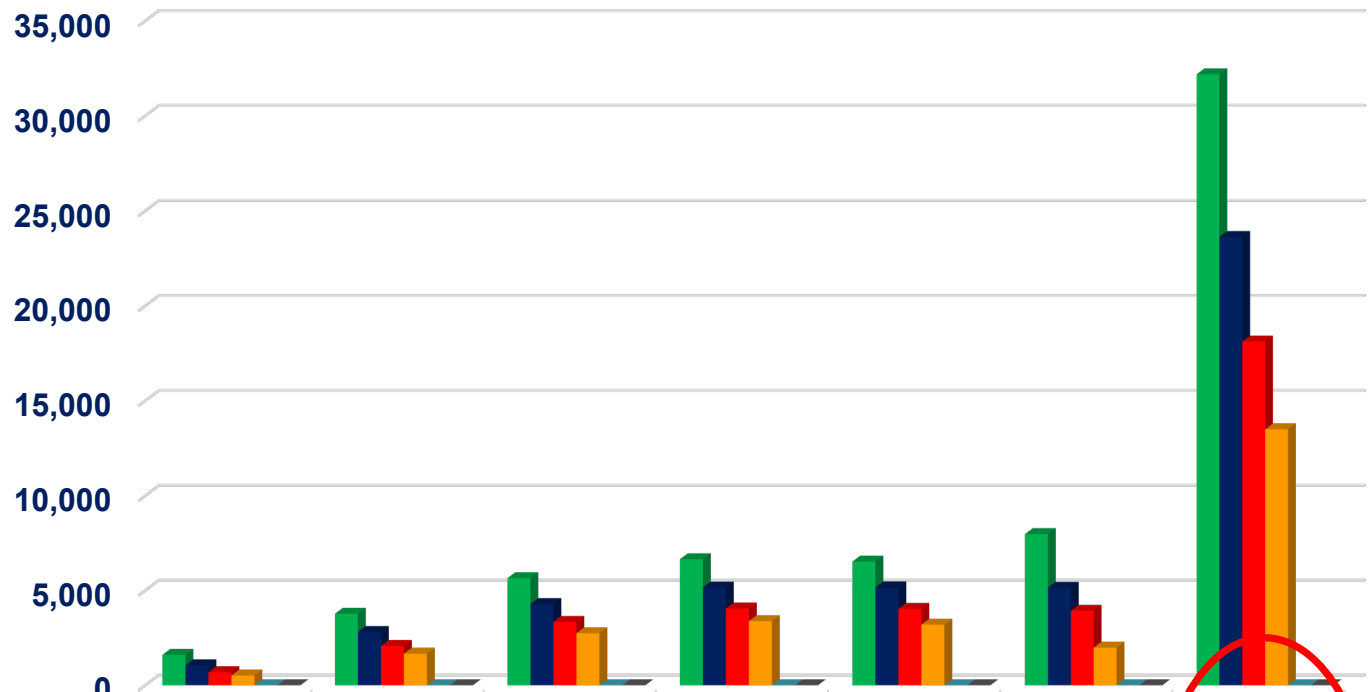
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# HCV positive males linked to the HCV treatment program by age group



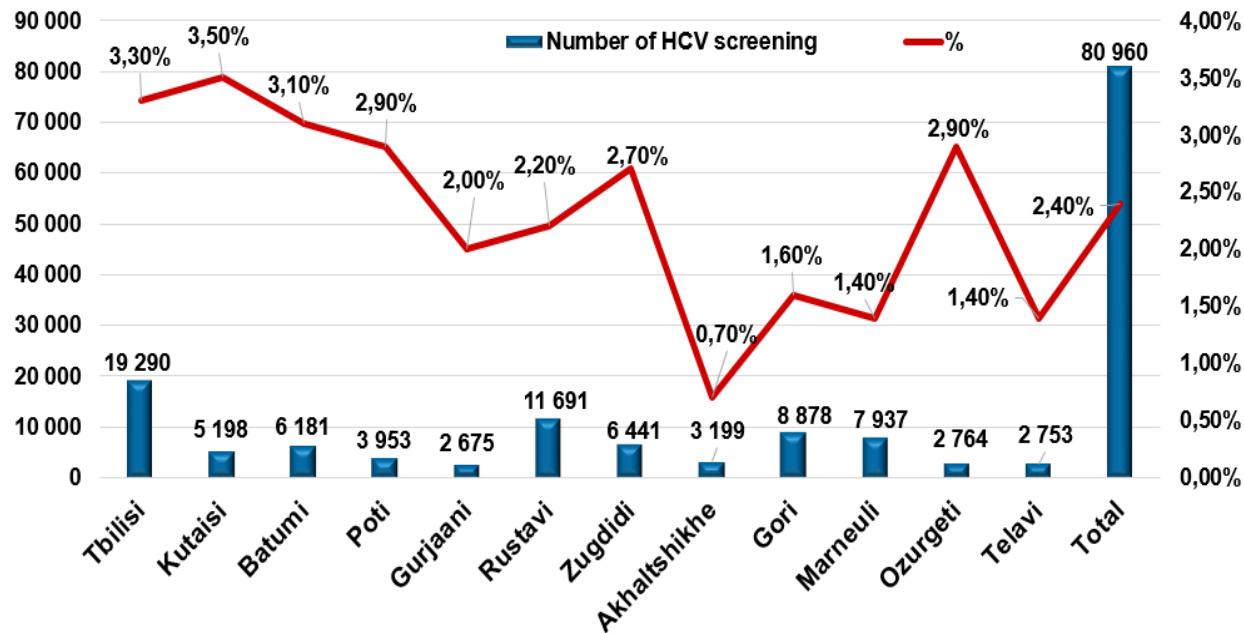
■ anti-HCV+	18-29	30-39	40-49	50-59	60-69	70<	Total
■ Confirmatory test	3,381	16,892	31,719	25,206	10,871	4,761	92,830
■ Confirmatory test Pos.	2,280	13,260	26,308	20,933	8,642	3,088	74,511
■ Treatment started	1,798	11,114	22,145	17,616	6,986	2,294	61,953
■ Coverage by confirmatory test %	1,336	8,867	18,591	14,489	5,333	1,175	49,791
■ Started treatment %	67.4%	78.5%	82.9%	83.0%	79.5%	64.9%	80.3%
	74.3%	79.8%	84.0%	82.2%	76.3%	51.2%	80.4%

# HCV positive females linked to the HCV treatment program by age group



■ anti-HCV+	18-29	30-39	40-49	50-59	60-69	70<	Total
■ Confirmatory test	1,607	3,774	5,651	6,652	6,525	7,977	32,186
■ Confirmatory test Pos.	1,053	2,809	4,286	5,160	5,167	5,148	23,623
■ Treatment started	688	2,075	3,345	4,051	4,032	3,930	18,121
■ Coverage by confirmatory test %	514	1,667	2,744	3,387	3,201	1,985	13,498
■ Started treatment %	65.5%	74.4%	75.8%	77.6%	79.2%	64.5%	73.4%
	74.7%	80.3%	82.0%	83.6%	79.4%	50.5%	74.5%

# HCV Screening Program in Public Service Halls



# Concept: Three Diseases (HIV/HCV/TB) Under One Umbrella

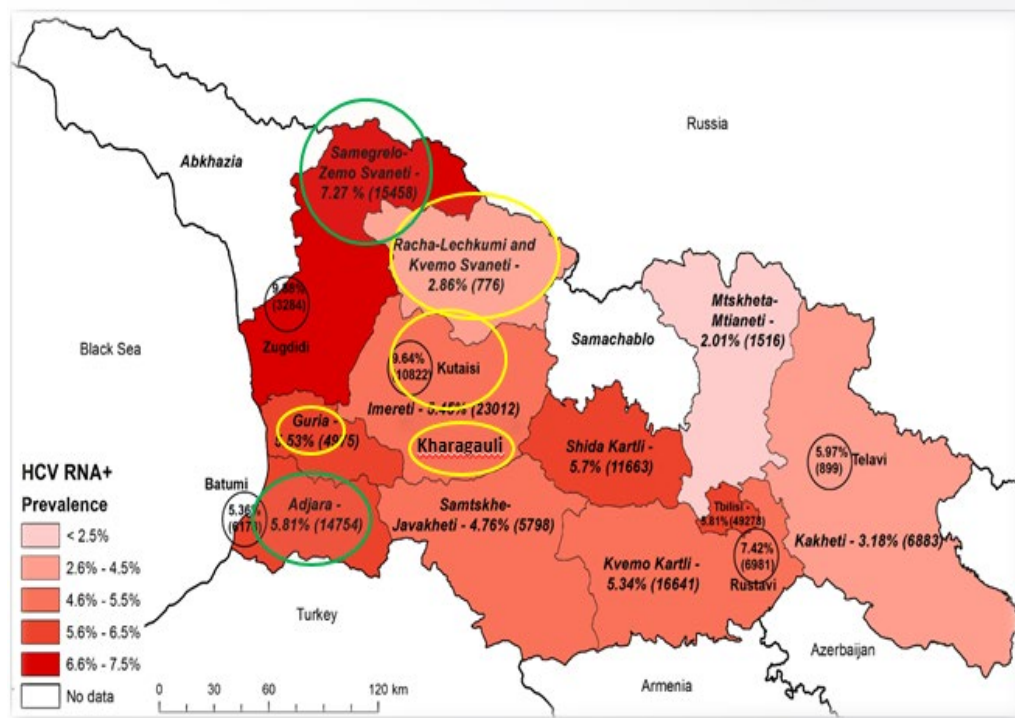


- Pilot project in Samegrelo-Zemo Svaneti region was launched in November, 2017
- Integrated HCV/HIV/TB screening protocol approved - **Target for screening - 40% of local population**
- 454 doctors and nurses trained
- Integrated multidisciplinary service monitoring groups established
- Municipal programs supporting pilot implementation approved

Due to the successful implementation of the project, the number of screened individuals has increased significantly. The project has since expanded in several regions of Georgia and is expected to be countrywide by the end of the year

88 178 persons were screened by November, 2018 on HCV, HIV and TB among which

- Anti-HCV+ 2279 cases
- Anti-HIV+ 37 cases
- Presumptive TB 192 cases

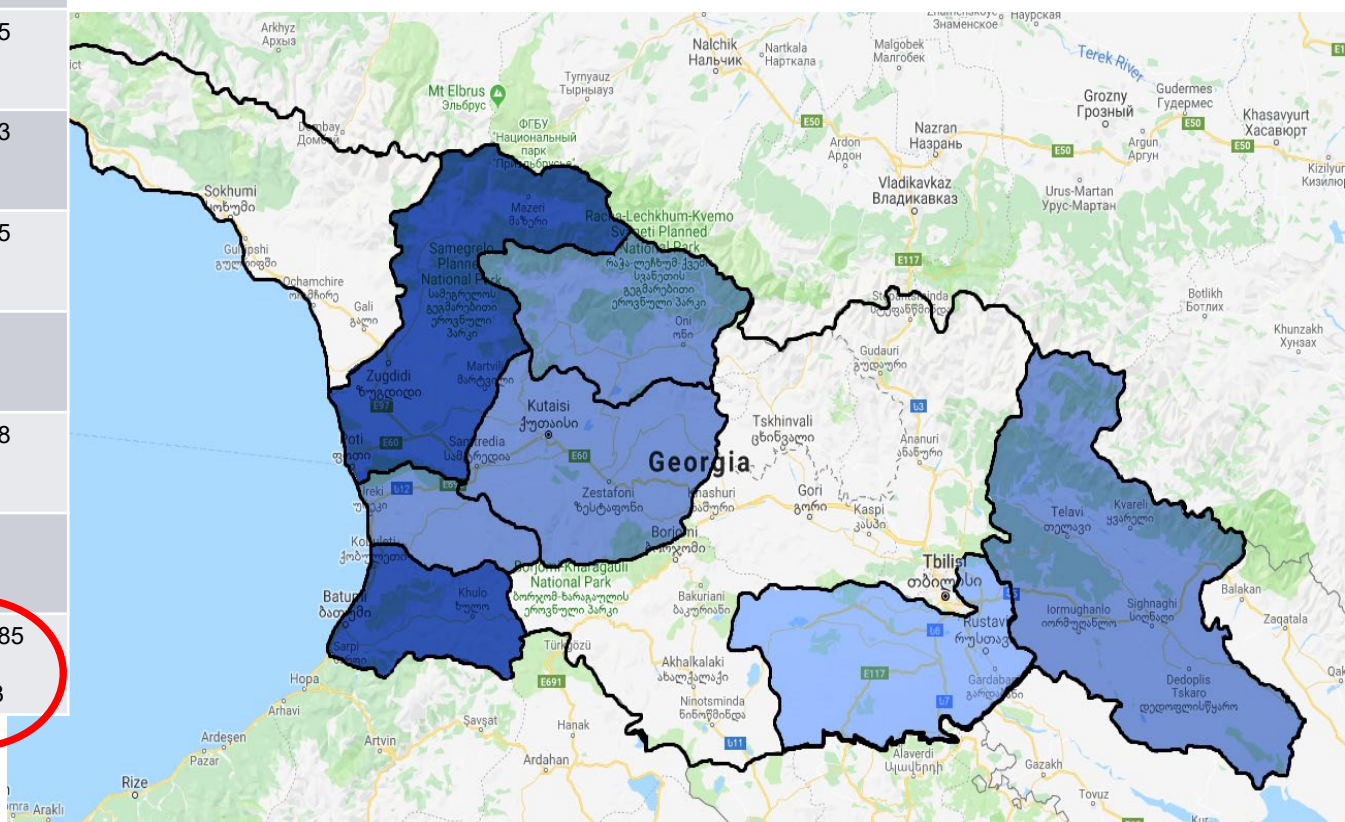




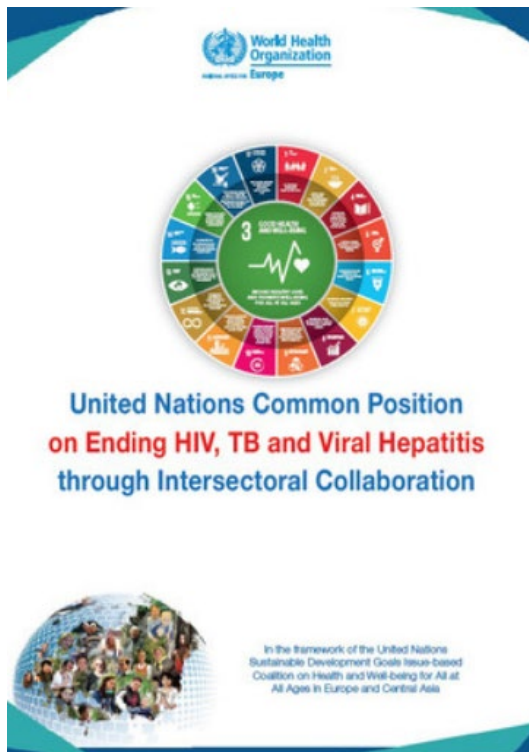
# Screening rollout - Three Diseases (HIV/HCV/TB) Under One Umbrella



Region	Population screened in PHC	Population screened (total)	Screening positive
Samegrelo-zemo Svaneti	124,458	172,774 (70.3%)	HCV 2778 HIV 57 TB 221
Adjara	70,701	161,482 (60.8%)	HCV 765 HIV 59 TB 788
Guria	21,014	64,765 (76.4%)	HCV 263 HIV 8 TB 15
Imereti	25,934	228,485 (58.8%)	HCV 275 HIV 13 TB 27
Racha-Lechkhumi	5,411	18,224 (78.7%)	HCV 94 HIV 0 TB 1
Kakheti	30,369	122,408 (50.7%)	HCV 268 HIV 12 TB 10
Mtskheta-Mtianeti	6,516	35,243 (49.0%)	HCV 42 HIV 2 TB 1
<b>Total</b>	<b>284,403</b>		<b>HCV 4485 HIV 151 TB 1063</b>



# Groundbreaking pledge of United Nations agencies to end HIV, TB and viral hepatitis epidemics in Europe at high-level meeting on ending TB



- A dedicated side event at the General Assembly
- Aimed to demonstrate how the Common Position can strengthen intersectoral collaboration and leverage further progress towards ending HIV, TB and viral hepatitis and achieving SDG 3.
- 14 United Nations agencies in the European Region bond to prioritize health outcomes and join forces

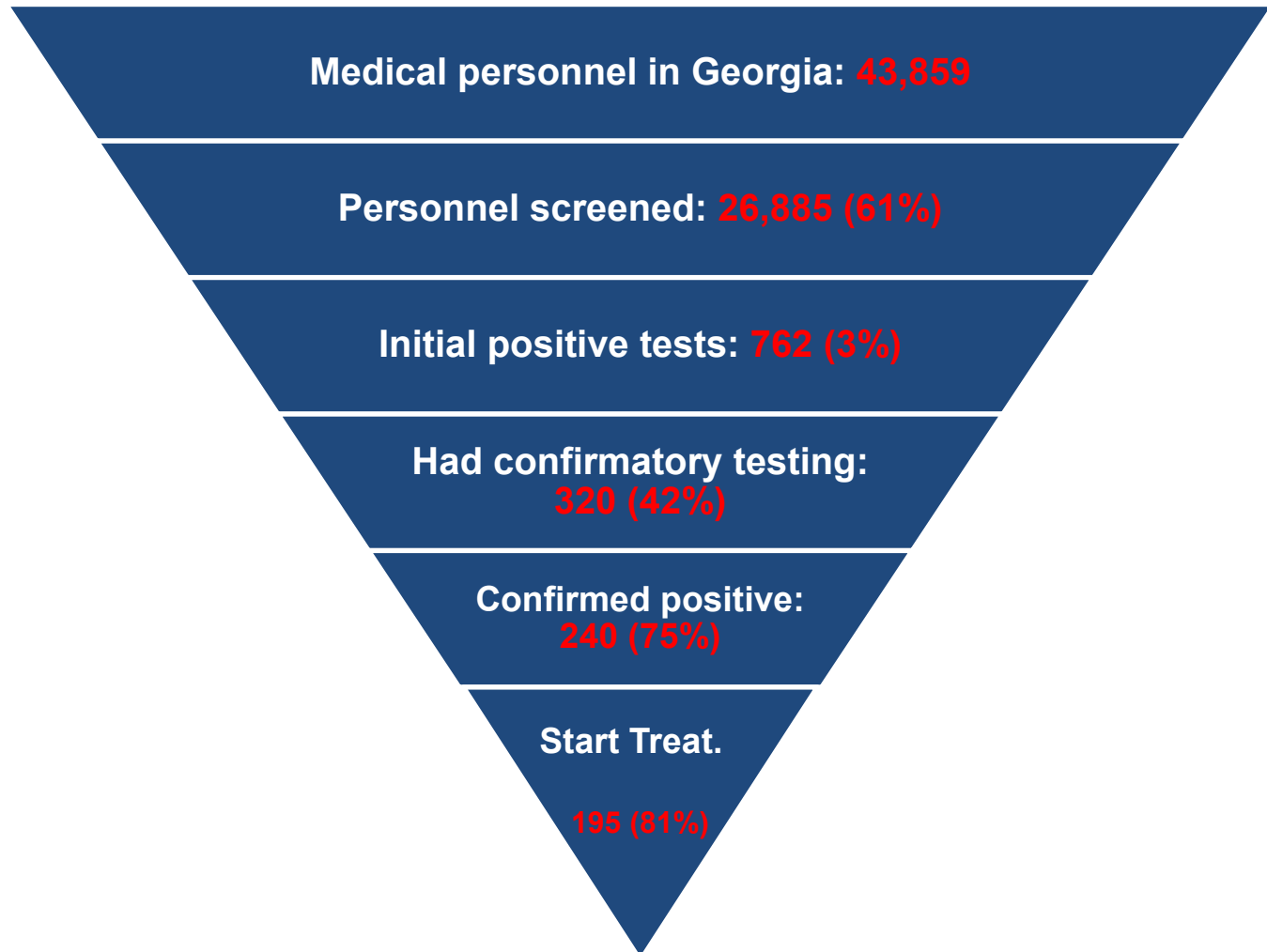


# Micro-elimination in specific risk-groups

	TB Patients	HIV Infected Individuals	Hemophilia Patients	OST Program Beneficiaries	Dialysis Patients	War Veterans and Their Family Members
Target Population	2 122	4 090	389	9 080	2 979	69 254
Screening Coverage %	94%	98%	99%	87%	89%	51%
Finding Screening Positives %	17%	36%	37%	86%	23%	12%
Confirmatory Pos.	228	821	72	4 925	368	2751
Started treatment	119	749	55	4 141	70	2320
Coverage by treatment %	52%	91%	76%	84%	19%	84%



# Screening of medical personnel, November 10, 2019



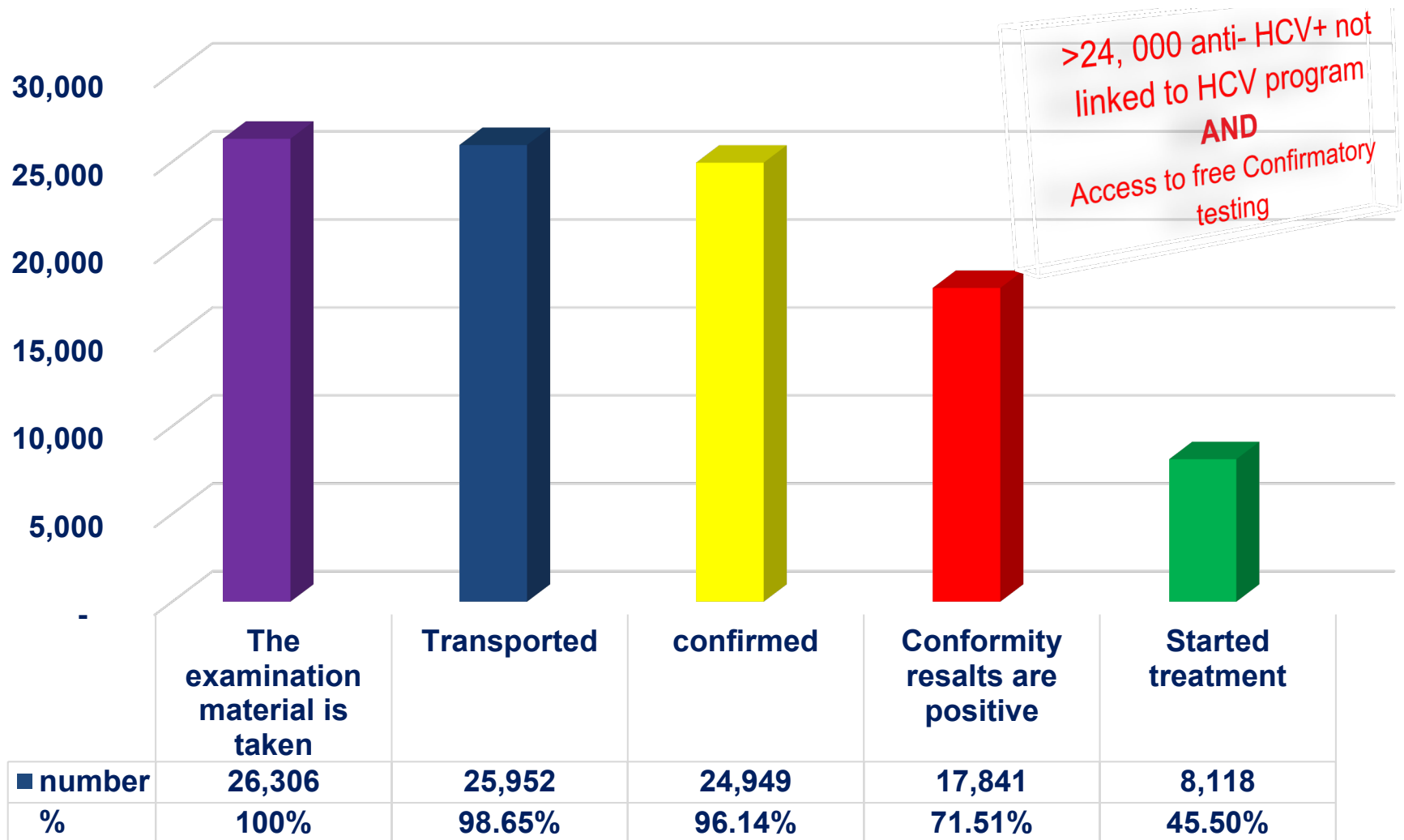
# Enhancement of Screening Campaigns

## Screening Campaigns:

- Community and organized settings in Tbilisi and regions
- Public Service Hall located at 13 cities
- During communication campaign interventions
- Sport events
- Festivals and concerts



# Centralized system of confirmatory testing - Hospitals and Harm Reduction Network, March 1, 2018 – November 10, 2019



# Future Plans: Finding remaining cases

125,016 adults  
(identified by ID  
number) were  
diagnosed anti HCV+

98,134 adult had HCV  
RNA confirmatory  
test

80,074 adults were  
HCV RNA+

16,785 HCV RNA+  
individuals have not  
initiated treatment

To reach target goals,  
33,2% of anti HCV+  
and 40,6% of HCV  
RNA+ cases need to  
be identified, and  
50,6% treated

## Solution to finding the remaining Cases

Strengthen Follow-up and Linkage to Care

Strengthen Communication campaigns

Intensify Routine Screening

Strengthen the Involvement of the Primary  
Healthcare Sector

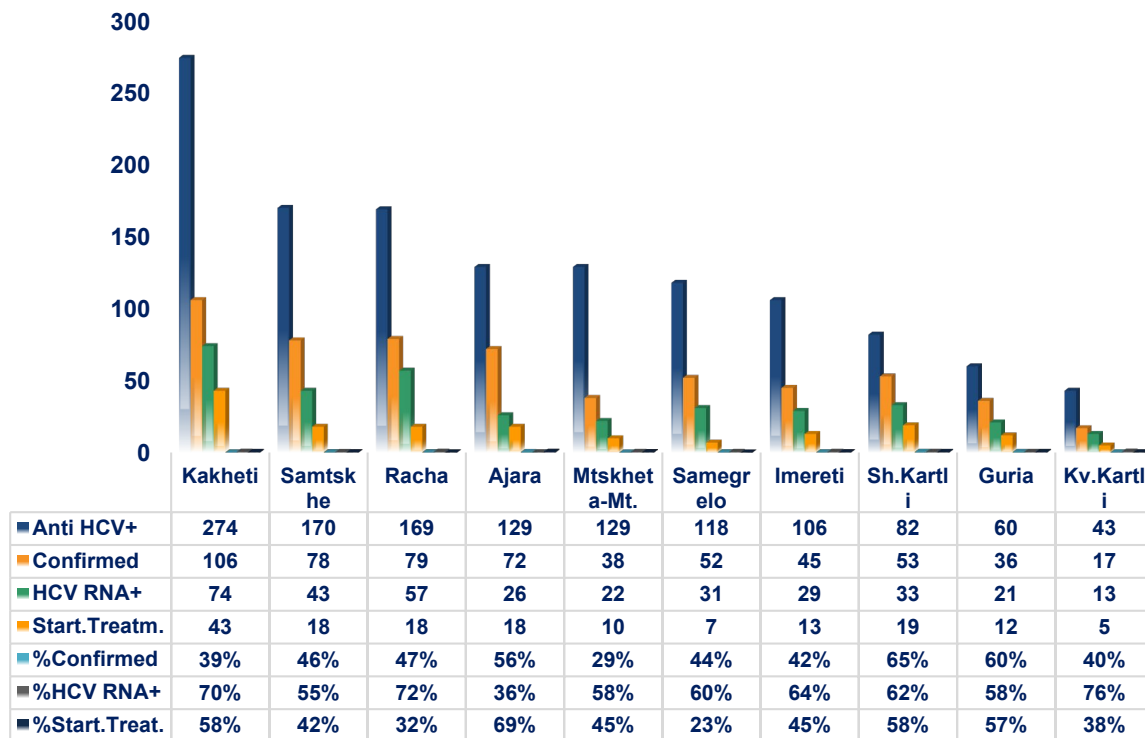
Implement the Samegrelo-Zemo Svaneti  
Project Countrywide

Intensify Enrollment of the Harm Reduction  
Network

1 705 000  
adults have  
been  
screened

1 150 000  
adults are  
left to screen

# Pilot Project: Finding Anti HCV+ individuals diagnosed over 3 months prior, have not had confirmatory testing, and are not involved in treatment (conducted by Public Health Centers)



Surveillance System



>24, 000 anti- HCV+ not linked to HCV program  
AND  
Access to free Confirmatory testing

Number of PHC involved in the project – 32  
Target of Anti HCV+ - 1280  
Confirmed – 576 (45% of Anti HCV+)  
HCV RNA+ - 349 (61% of Confirmed)  
Started Treatment – 163 (47% of RNA+)



# Future Plans: Linkage-to-care project (FIND)

## TARGET REGIONS:

- ☐ Samegrelo Zemo Svaneti
- ☐ Imereti
- ☐ Guria
- ☐ Racha Lechkhumi Kvemo Svaneti
- ☐ Ajara
- ☐ Kakheti

## TARGET NUMBERS

7 143 of Anti HCV Positives cases

70 % will complete HCV  
confirmatory test

=

5 000 Beneficiaries

- ☐ The funding of Public Health Centers for each confirmed case will be 15 GEL – financing by case based methodology
- ☐ In case of target numbers (see below illustration) are reached, Public Health Centers will get additionally 10 GEL per each confirmed case - financing by results based methodology

HCV RNA Positives, about 75 %

=

3 750 Beneficiaries

HCV RNA Negatives, about 25 %

=

1 250 Beneficiaries

50 % of HCV RNA positives will start treatment

=

1 875 Beneficiaries

# Summary and Recommendations

- HCV Elimination program is a major driver for health system strengthening and advancing public health agenda in Georgia, especially for HIV and TB. HCV elimination program supports the development of other key public health programs such as Safe Blood, Infection Control, Harm Reduction, etc.
- In the first 4.5 years of the HCV Elimination Program, Georgia has scaled up the screening and treatment services achieving impressive results – 61% screening coverage and 49% treatment coverage with 98.7% cure rate
- Enhancing HCV testing and linkage to care and treatment services are critical to reaching by the end of 2020 HCV elimination goals
- Provision of HCV screening, confirmation, care and treatment services at non-specialized settings nearer to patients' homes is critical for achieving the elimination goals
- Decentralization and integration of HCV/HIV/TB services' delivery in primary care or harm reduction settings can result in overcoming barriers to access care and treatment
- In order to achieve HCV elimination goals, screening should be targeted to the specific age groups where the biggest proportion of antibody+ cases to be revealed are still concentrated (male population - 35-55 age group, female population –50 years old and above age group)
- Strengthening the follow up and linkage to further diagnostic testing and treatment of more than 24,000 antibody+ individuals and 16,000 RNA+ individuals who were lost from the system
- Lessons learned from the Georgia HCV Elimination Program can inform programs in other countries striving to eliminate HCV as a public health threat.

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Nohep Movement



National Center for Disease Control and Public Health

HCV Elimination Program provider facilities

TAG Members