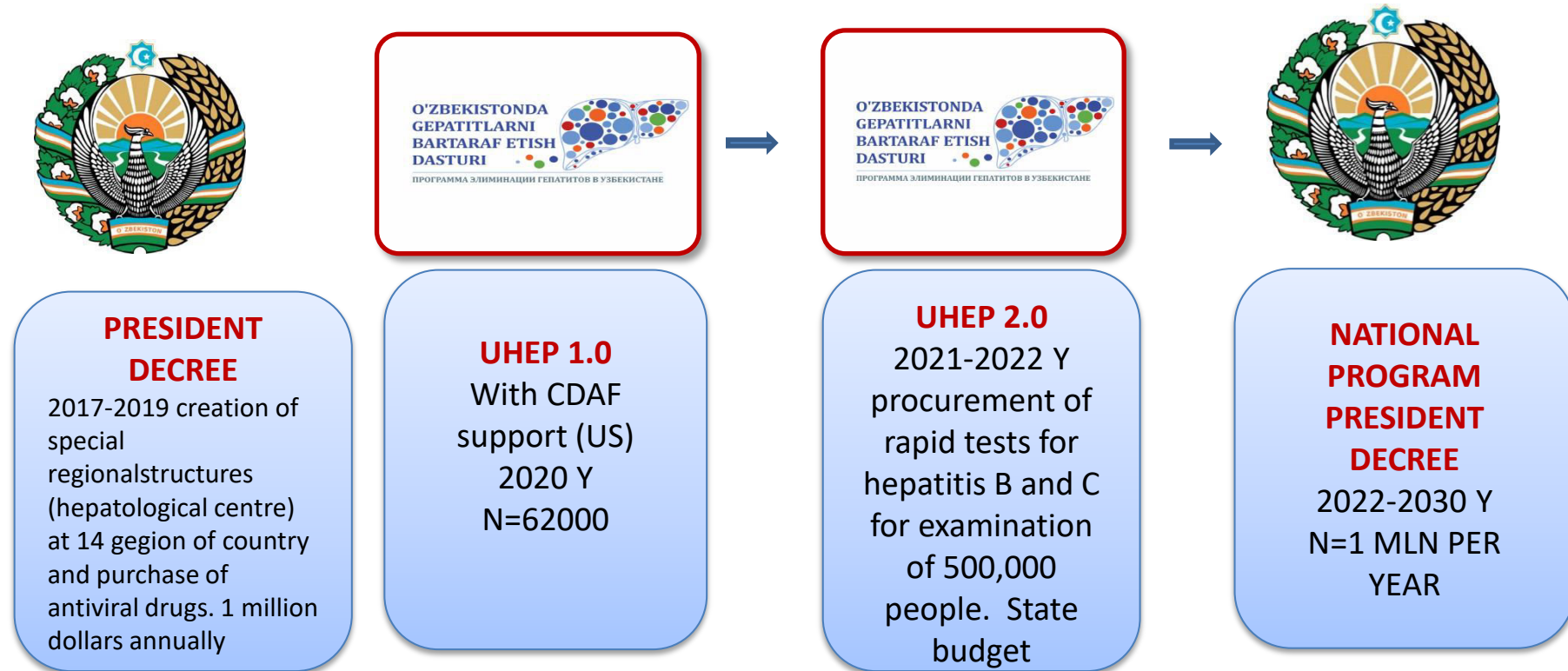


Hepatitis Delta epidemiology and experiences with HDV diagnosis and reflex testing in Uzbekistan

Erkin Musabaev

Director of Institute of Virology, Tashkent Uzbekistan

Stages of implementation of the national program





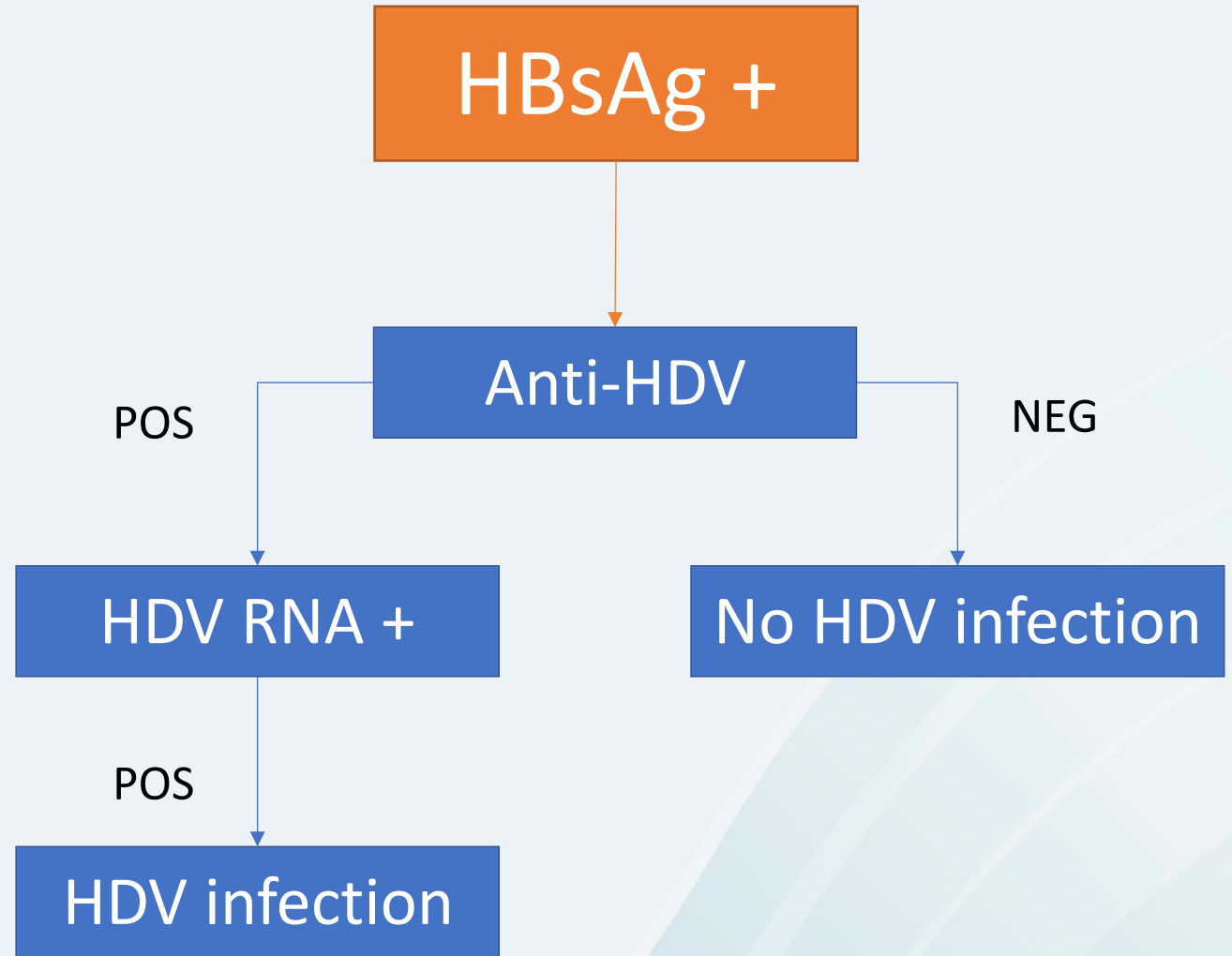
Population-based serological study of the prevalence and risk factors of hepatitis B, C and D in the Republic of Uzbekistan (n=14 000) (unpublished data of 2021-2022).

Study objectives for hepatitis B, C and D

To determine the prevalence of HCV, HBV and HDV infection, as well as the prevalence of chronic HCV, HBV, and HDV infection among children **aged 5 to 17 (n=4561)** years and adults **aged 18 years and older (n=9439)** in selected regions of the Republic of Uzbekistan

To identify risk factors for HCV, HBV and HDV infection in the Republic of Uzbekistan (behavioral risk factors, parenteral interventions, etc.)

HDV testing strategy

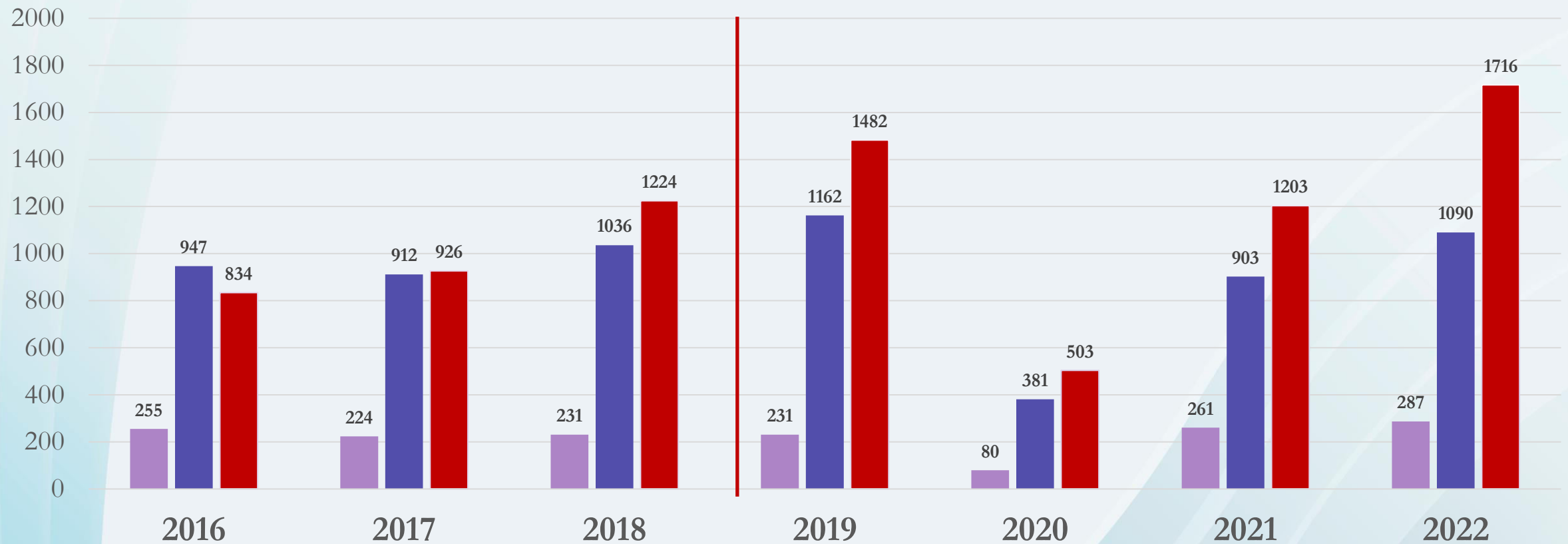


HDV RNA (among HBsAg positive)

Region	Adults (n=495)			Children (n=30)			Total (n=525)		
	N	%	95% CI	n	%	95% CI	n	%	95% CI
Andijan region	12/76	15.79%	6.86 - 24.72	2/10	20.00%	0.0 - 47.69	14/86	16.28%	7.76 - 24.8
Rep. of Karakalpakstan	0/40	0.00%	0.0 - 0.0	0/0	0.00%	0.0 - 0.0	0/40	0.00%	0.0 - 0.0
Kashkadarya region	15/110	13.64%	6.74 - 20.53	3/10	30.00%	0.0 - 63.9	18/120	15.00%	8.08 - 21.92
Khorezm region	1/64	1.56%	0.0 - 4.62	0/1	0.00%	0.0 - 0.0	1/65	1.54%	0.0 - 4.55
Samarkand region	8/106	7.55%	2.32 - 12.78	0/2	0.00%	0.0 - 0.0	8/108	7.41%	2.28 - 12.54
Tashkent region	5/54	9.26%	1.15 - 17.37	1/5	20.00%	0.0 - 59.16	6/59	10.17%	2.04 - 18.3
Tashkent city	2/45	4.44%	0.0 - 10.6	0/2	0.00%	0.0 - 0.0	2/47	4.26%	0.0 - 10.15
Total	43/495	8.69%	6.09 - 11.28	6/30	20.00%	4.01 - 35.99	49/525	9.33%	6.72 - 11.95

Viral etiologies in **15888** liver cirrhosis were recruited from **all over** Uzbekistan.
at the Clinical Department of the Tashkent Institute of Virology, **2016-2022**

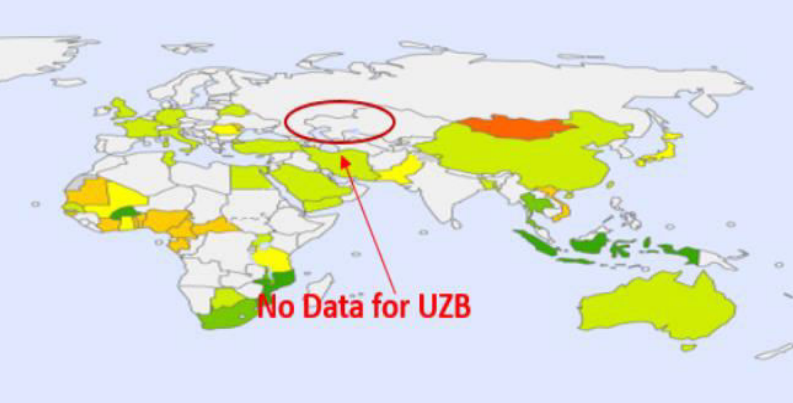
Prevalence of Liver Cirrhosis of different viral etiology in Uzbekistan



<https://onlinelibrary.wiley.com/doi/10.1111/liv.14243>

■ HBV ■ HCV ■ HDV

<https://www.sciencedirect.com/science/article/abs/pii/S2468125319303504?via%3Dihub>



National prevalence is **8.69%** among HBsAg+



Among donors-prevalence is **9.8%**



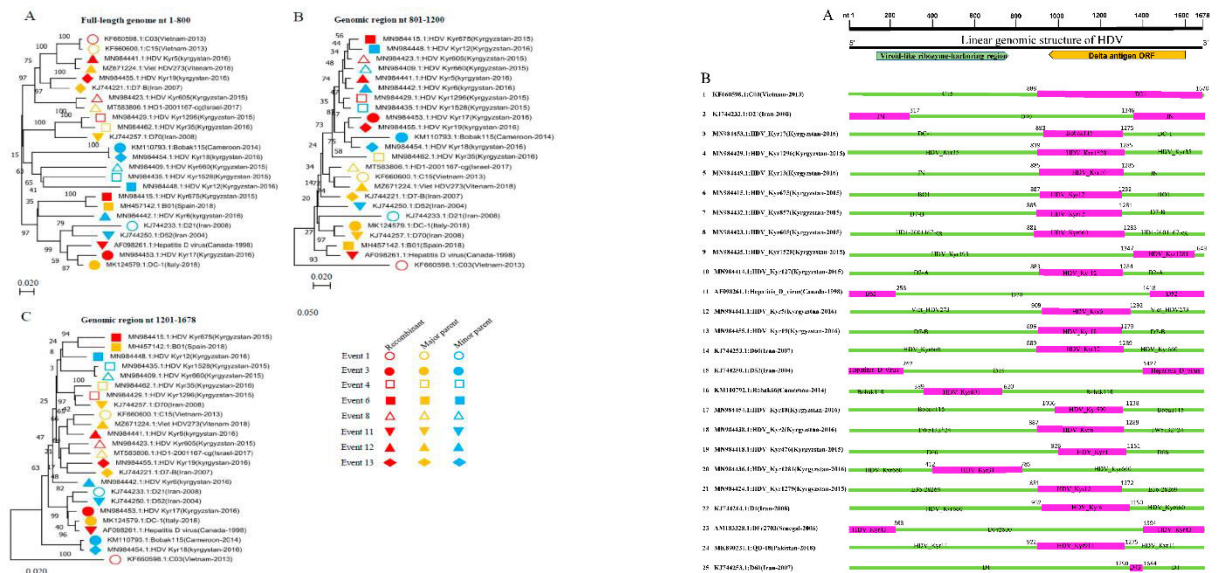
Among all cirrhosis, **50.2%** had cirrhosis of HDV etiology



Among patients with LC HDV etiology, **19.6%** were younger than **30 years** of age.

Finding:

Kyrgyzstan in the Worldwide HDV Genotype Distribution



Phylogenetic trees based on three different HDV-RNA genomic regions. (A) nt 1–800. (B) nt 801–1200. (C) nt 1021–1678. Twenty-four HDV strains involved in the recombination events (Event 1, 3, 4, 6, 8, 11, 12, and 13), as an example, were analysed using phylogenetic trees to further confirm the recombination events. The recombinants, minor and major parents, are indicated in red, blue, and yellow colours, respectively.

Recombination map across the human HDV genomes for recombination events

Global Distribution and Natural Recombination of Hepatitis D Virus: Implication of Kyrgyzstan Emerging HDVs in the Clinical Outcomes/ Viruses 2022, 14(7), 1467; <https://doi.org/10.3390/v14071467> / Viruses 2022, 14(7), 1467; <https://doi.org/10.3390/v14071467>



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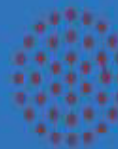
INTERNATIONAL EXPERIENCE OF
NATIONAL PROGRAMS
FOR THE ELIMINATION OF VIRAL HEPATITIS

Uzbekistan and
Azerbaijan Association of
Gastroenterology and
Hepatology

MAY 22-23, 2025



Ministry of Health of the
Republic of Uzbekistan



Research Institute of Virology
of the Republican specialized
scientific and practical medical
center of epidemiology,
microbiology, infectious and
parasitic diseases



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