



**Results of season 2016-2017 Moscow, Russia**

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**Site presentation**

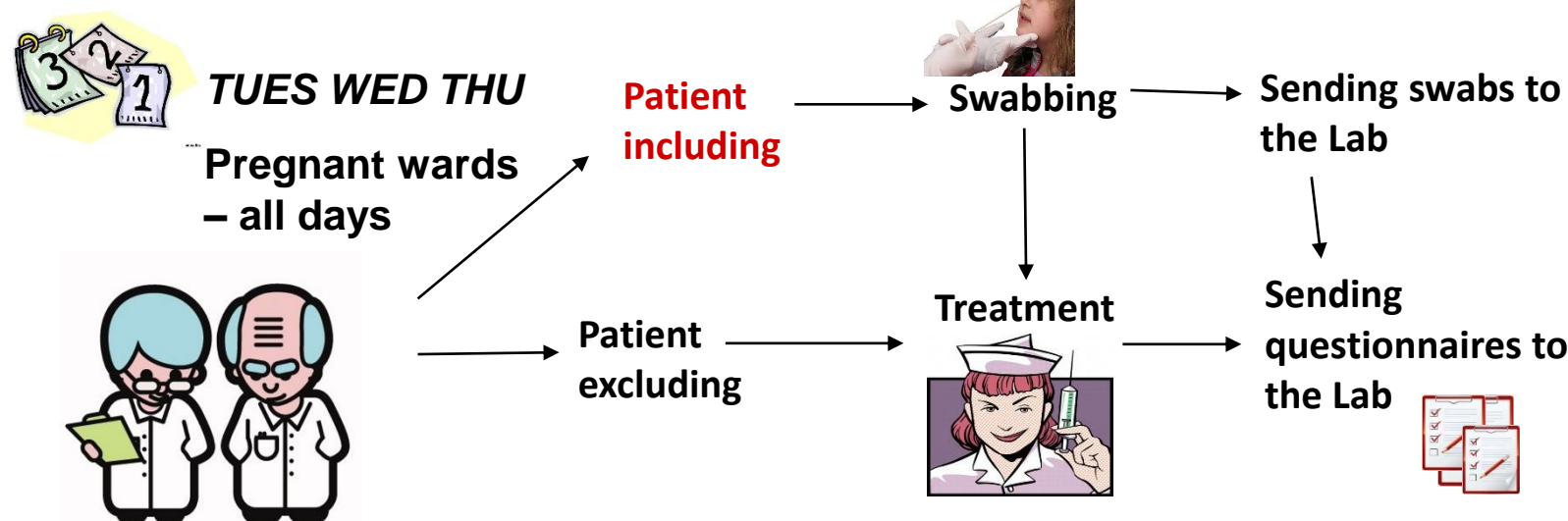
- Hospital #1 for Infectious Diseases is an emergency reference clinic in the city.
- Speciality – respiratory, intestinal, neuro-, hemorrhagic infections, hepatitis.
- It serves Moscow citizens and guests from 0 to 90 y.o.
- Moscow's population is about 12,3 million.
- Influenza seasonality are usually registered from December to May.

Capacity of the hospital

Total number of beds 706	Adults 485	Children 221	Obstetric 69	ICU 12
Beds Included in GISHN				
314 (6 wards for ARVI)	120	53 (0-3yo) 60 (3-14yo)	69	12

**Methods**

Hospital activity.



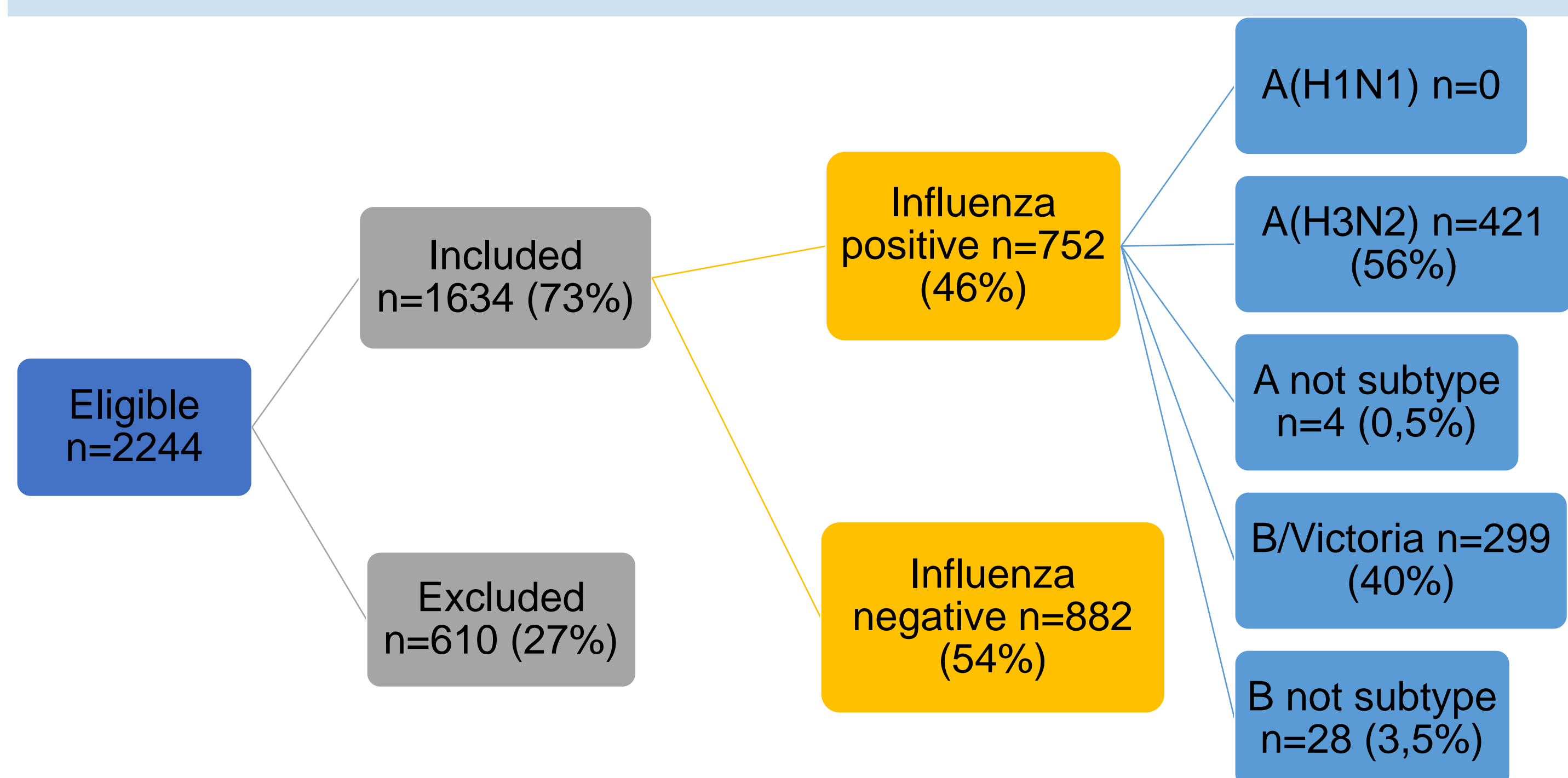
Laboratory activity.

**Influenza Etiology and Epidemiology laboratory**

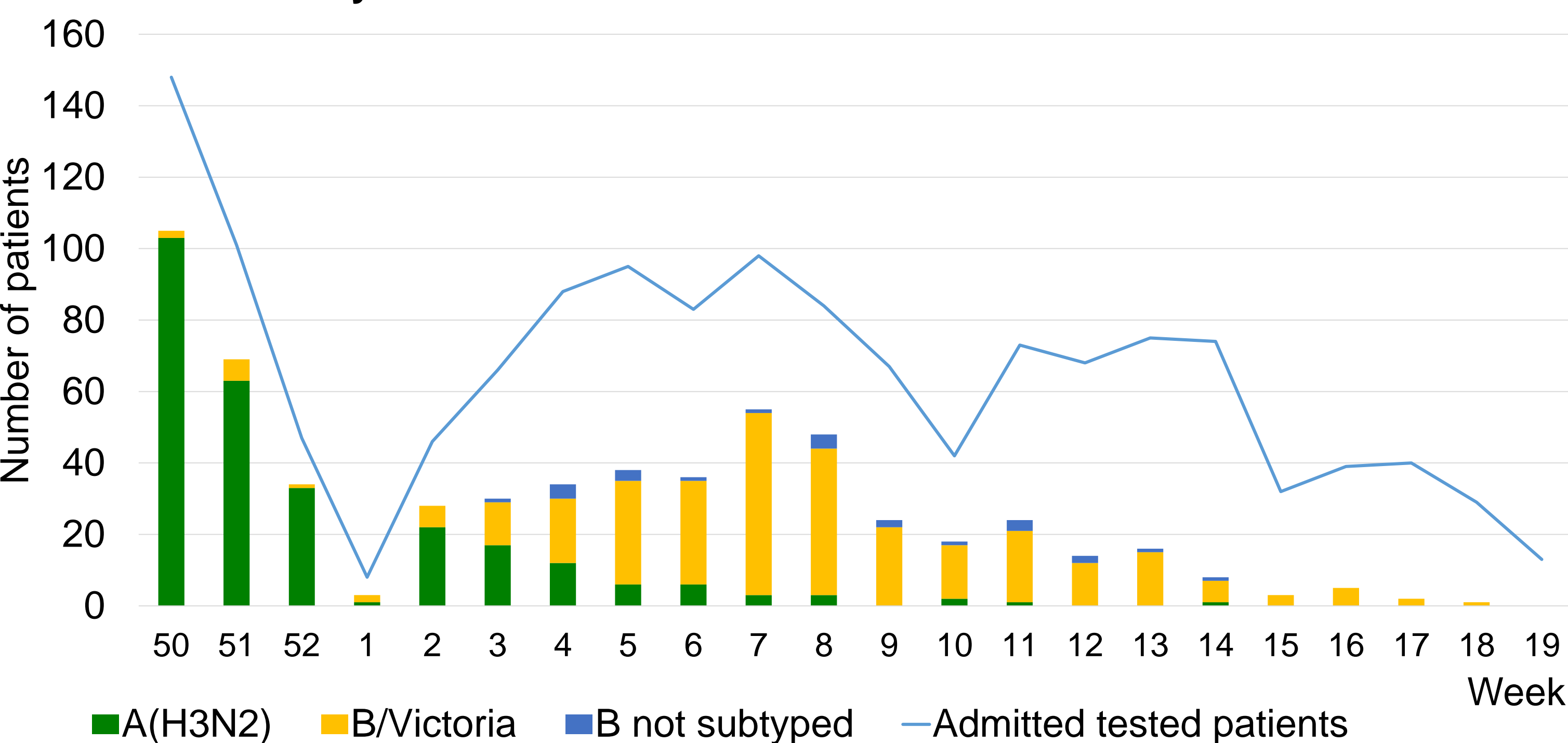
- PCR diagnostic
- Virus isolation
- Sera diagnostic
- Completion GISHN excel file

Russian commercial diagnostic PCR kits were used: «Ribosorb» and «Riboprep» (AmpliSens, Russia), «DNA-prep» (DNA-technology, Russia); «Reverta-L» (AmpliSens, Russia), «Reagent kit for reverse transcription» (DNA-technology, Russia); AmpliSens Influenza virus A/B, AmpliSens Influenza virus A-type (H1N1 and H3N2), AmpliSens Influenza virus A/H1-swine-FL (H1N1pdm09), Evolutionary lines of influenza B virus (DNA-technology, Moscow), in-house reagents for type B-lineages.

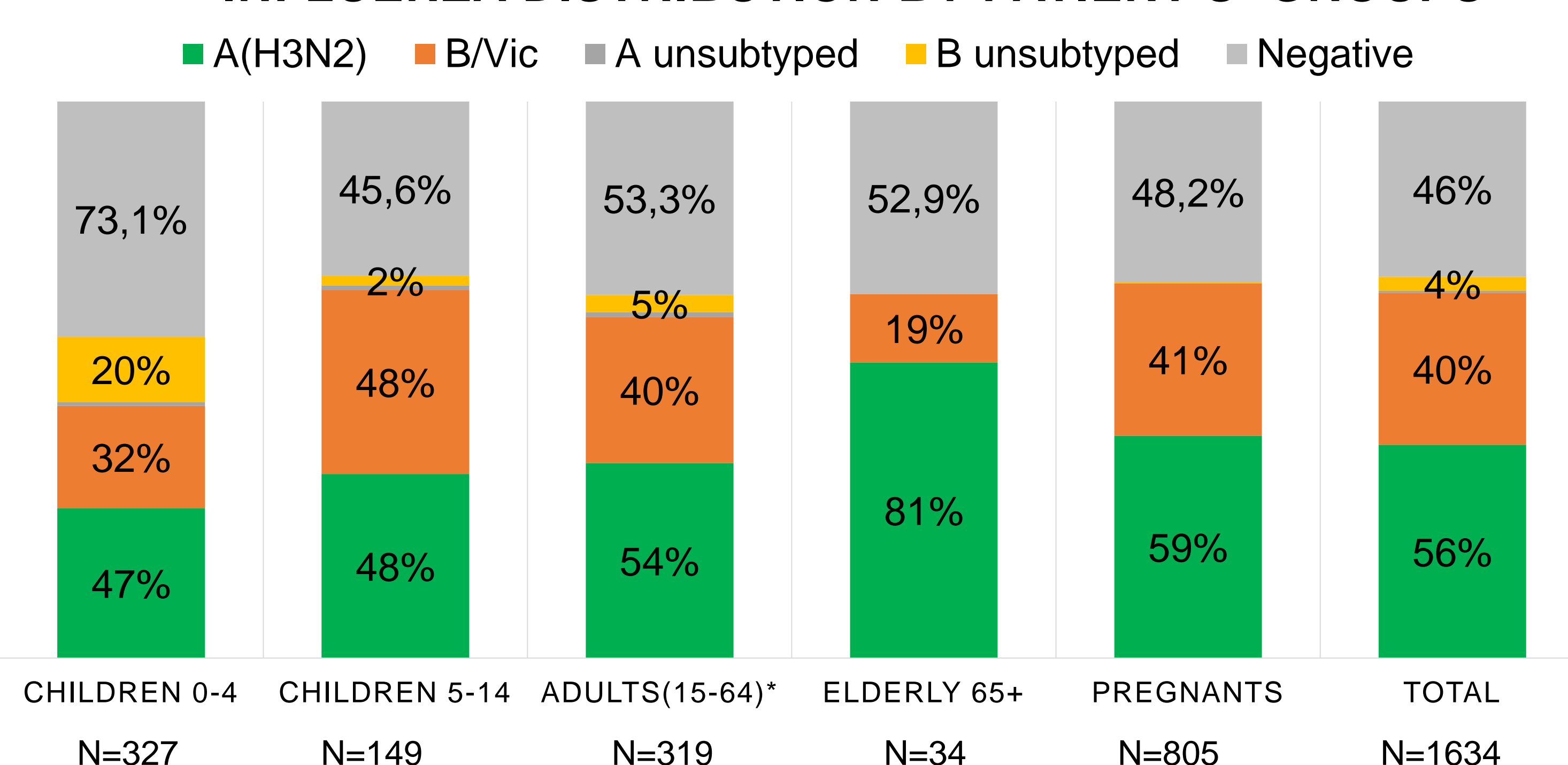
**Results**



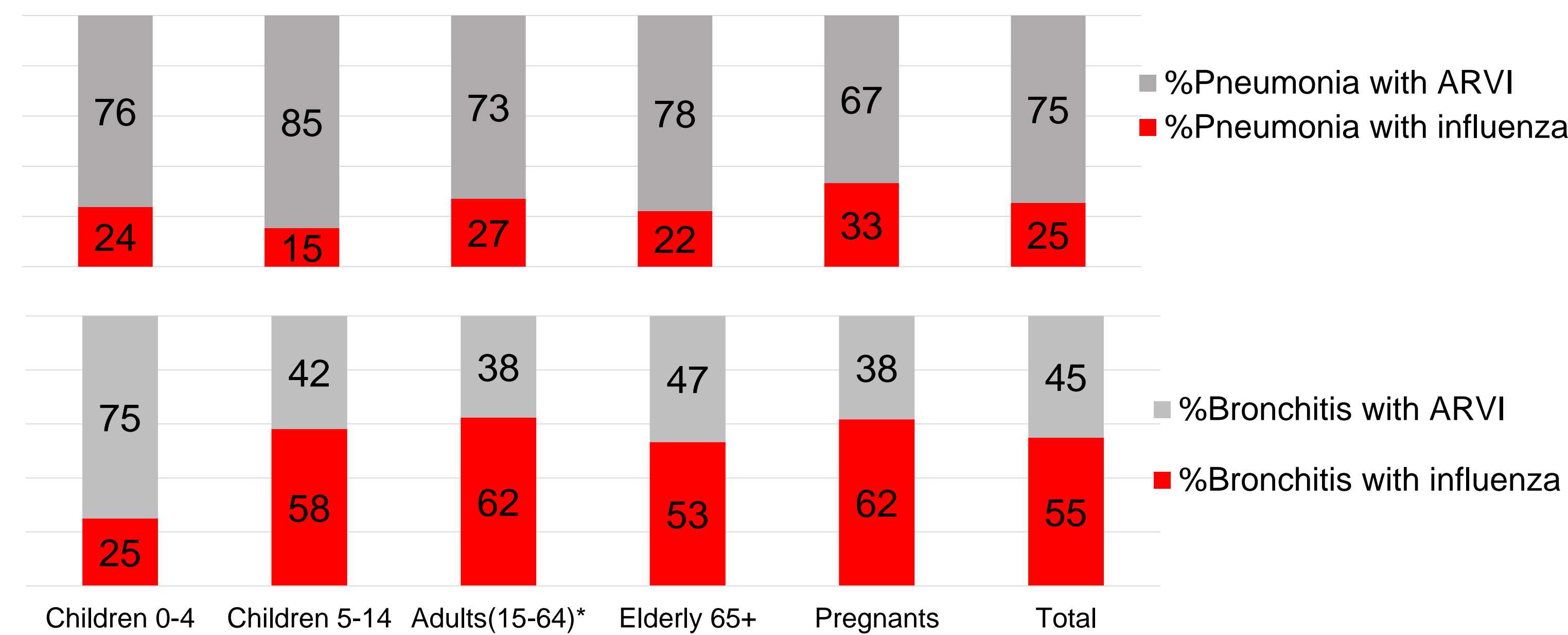
**Weekly admissions and influenza results GISHN 2016-2017**



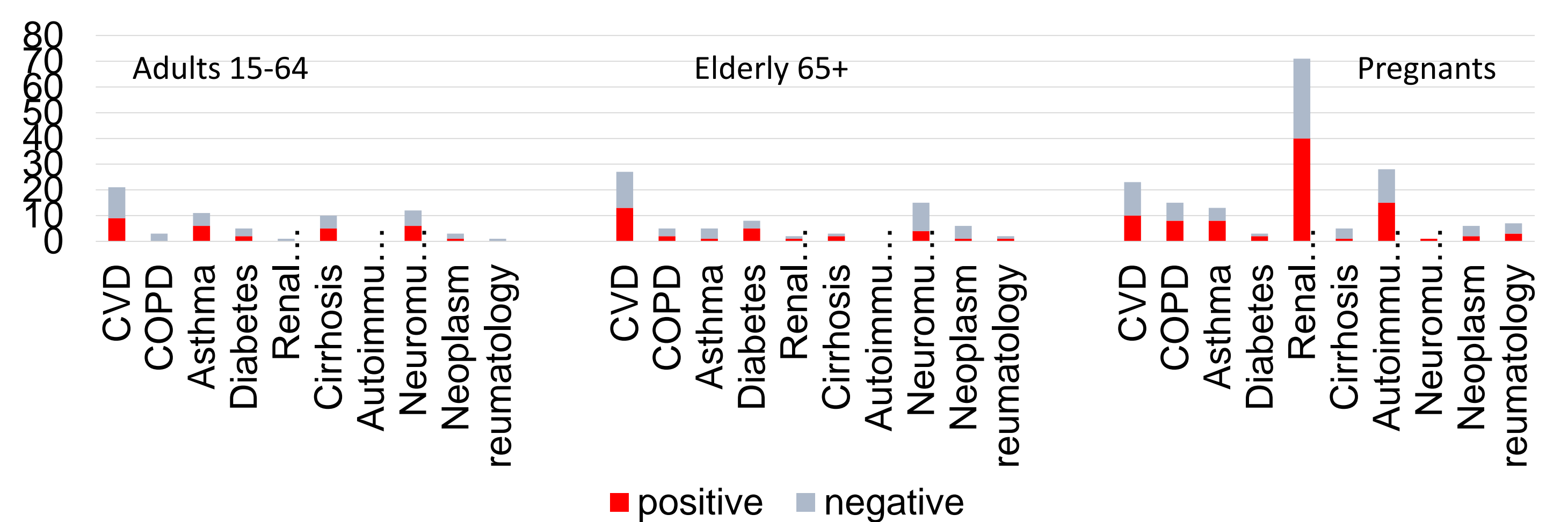
**INFLUENZA DISTRIBUTION BY PATIENT'S GROUPS**



\*except pregnant



**Comorbidities**

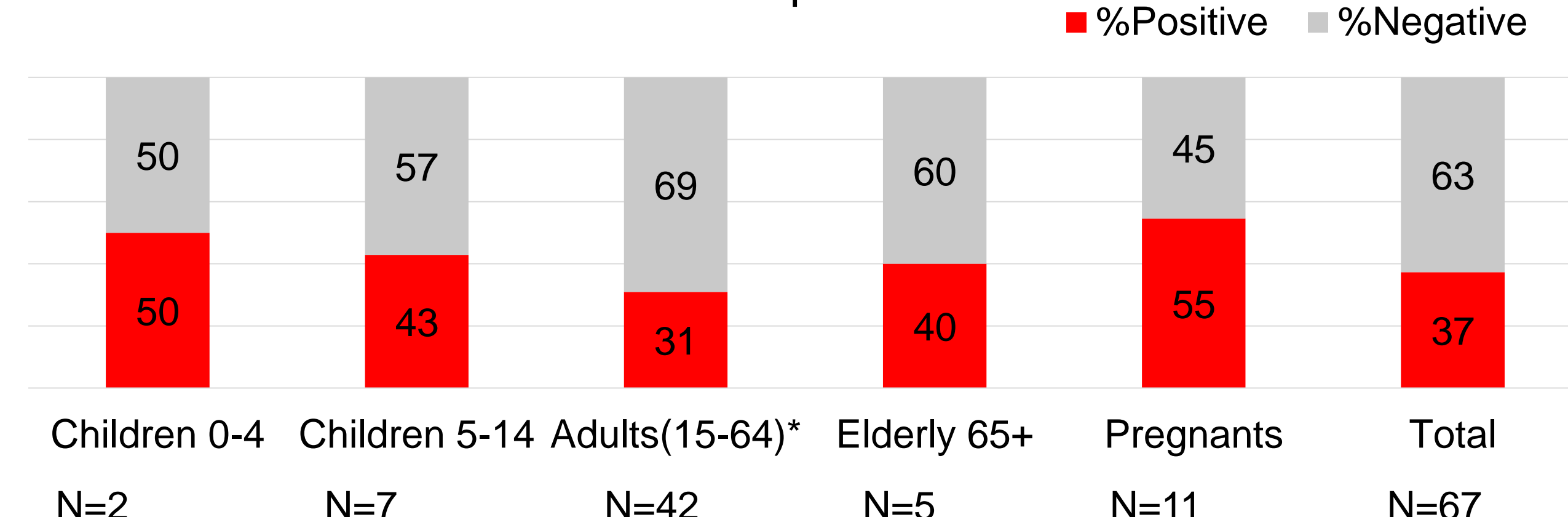


**Specific antibodies (HI test) to influenza viruses in sera taking during hospitalization of patients with acute respiratory disease in 2016-2017**

Influenza viruses	Vaccinated (6)		Unvaccinated ARVI (18) / SARI (11)	
	GMT±2m (lg)	≥1:40 (%)	GMT±2m (lg)	≥1:40 (%)
A/California/07/2009 (H1N1)pdm09 – v*	5,7±2,0	67,0	4,3±0,9 / 3,7±0,7	39,0 / 27,0
A/Michigan/45/2015 (H1N1)pdm09	5,0±1,5	50,0	4,2±0,9 / 3,9±1,1	33,0 / 27,0
A/Switzerland/9715293/2015 (H3N2)	6,2±1,3	83,0	4,7±0,9 / 4,0±1,0	50,0 / 36,0
A/Hong Kong/5738/14 (H3N2) – v*	7,3±0,9	100	4,8±1,1 / 3,7±0,9	44,0 / 18,0
B/Phuket/3073/13 (Yam)	7,0±1,3	100	5,9±0,9 / 5,6±1,3	83,0 / 82,0
B/Brisbane/60/2008 (Vic) – v*	6,0±1,8	67,0	4,9±0,8 / 4,6±0,9	39,0 / 27,0

A/California/07/2009 (H1N1)pdm09 – v\* - vaccine strain

**Vaccinated patients**



**Key aspects & challenges**

**Key aspects from the season**

- Sharp start of influenza season on 49-50 wks of December 2016
- Dominant influenza virus – A(H3N2)
- No one case of influenza A(H1N1)pdm09 and B/Yamagata-lineage
- Bronchitis are commonly registered during influenza infection
- CVD, renal and autoimmune diseases are most common and contribute to influenza infection
- Prevalence of pregnant women among female admissions
- A great number of pregnant women with influenza (more 50%)
- No deaths and 1 case of ICU

**Challenges**

- A lot of exclusions (27%)
- Few vaccinated patients
- Some challenges in gathering data from vaccinated patients
- Challenge in patients needed ICU

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