

Seasonal Influenza and CEU Myanmar

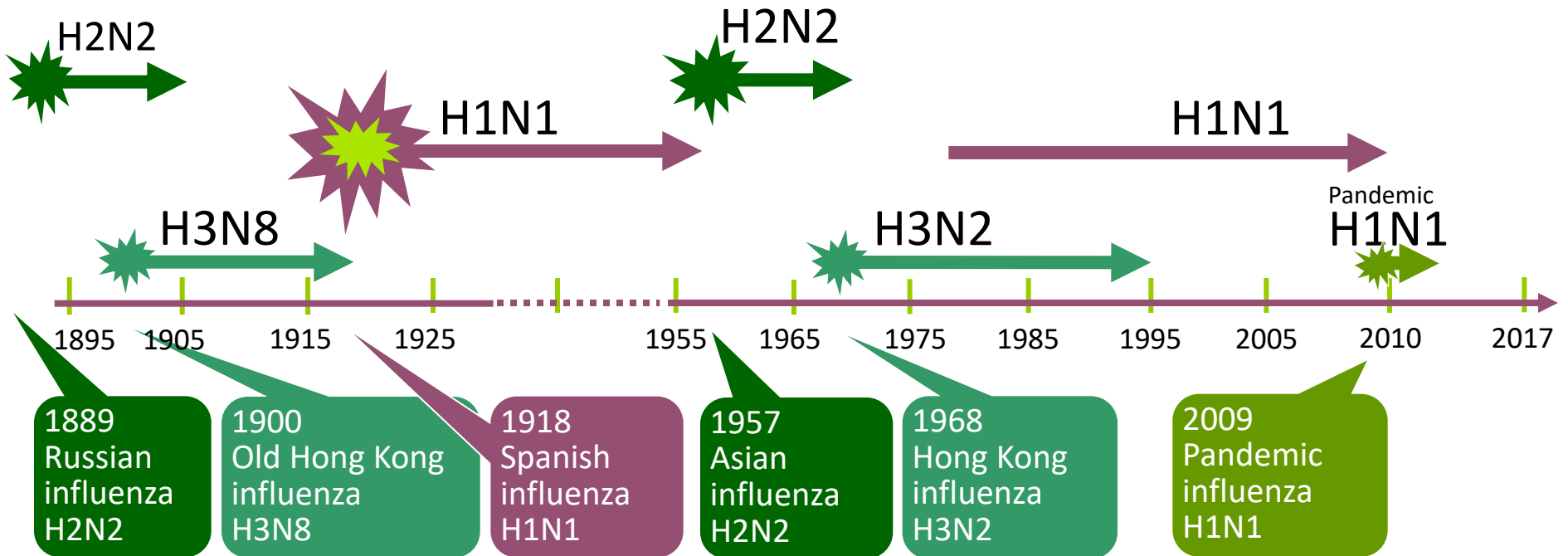
Dr. Khin Khin Gyi
Director
Central Epidemiology Unit

General information about seasonal Influenza

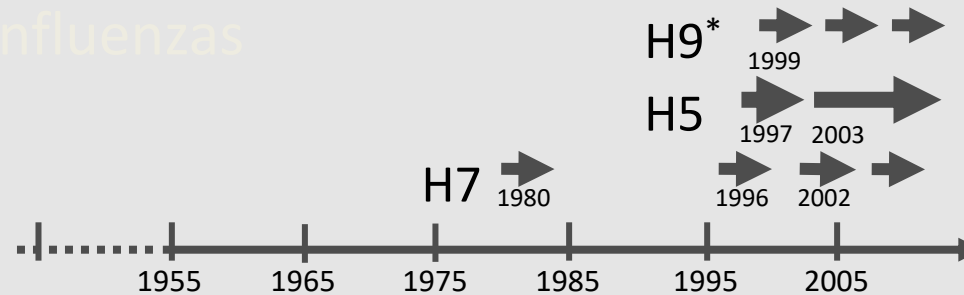
- Seasonal influenza is an acute viral infection that spreads easily from person to person.
- Seasonal influenza viruses circulate worldwide and can affect people in any age group.
- In temperate climates, seasonal epidemics occur mainly during winter while in tropical regions, influenza seasonality is less obvious and epidemics can occur throughout the year.
- Seasonal influenza is a serious public health problem that can cause severe illness and death in high risk populations.
- An influenza epidemic can take an economic toll through lost workforce productivity and strained health services.
- Influenza vaccination is an effective way to prevent disease.
- Antiviral drugs are available for treatment, though influenza viruses can develop resistance to the drugs.

ကပ်ရောဂါအသွင်ဖြစ်ပွားခဲ့သည့် ရာဇဝင်

Recorded human pandemic influenza
(early sub-types inferred)



Recorded new avian influenzas



Overview of Influenza Outbreaks, Global and Myanmar

Year Influenza	Epidemics	Virus Type	Deaths	Remarks
1918-1919	The Spanish	A/H1N1	40 Millions	
1957-1958	The AsianFlu	A/H2N2	1 Million	
1968-1069	The Hong Kong Flu	A/H3N2	1 Million	
2003	Avian Influenza	A/H5N1	-	60 countries across Asia, Europe, Middle East & Africa. 220 million birds infected & culled. (One and only case was seven years old girl from Kyaing-Ton Township of Shan (East Region), Myanmar. Recovered.)
2009	New Influenza Pandemics	A/H1N1	575,400	43-49 million infected & 74 countries affected. (First case confirmed in Myanmar on 11th June 2009. Recovered.)
Since February 2013	New Influenza with pandemic	A/ H7N9	610	China; three human cases originated in China and were reported in Malaysia (1) and Canada (2). 1582 confirmed; 610 deaths (since February 2013).



Seasonal influenza vaccination

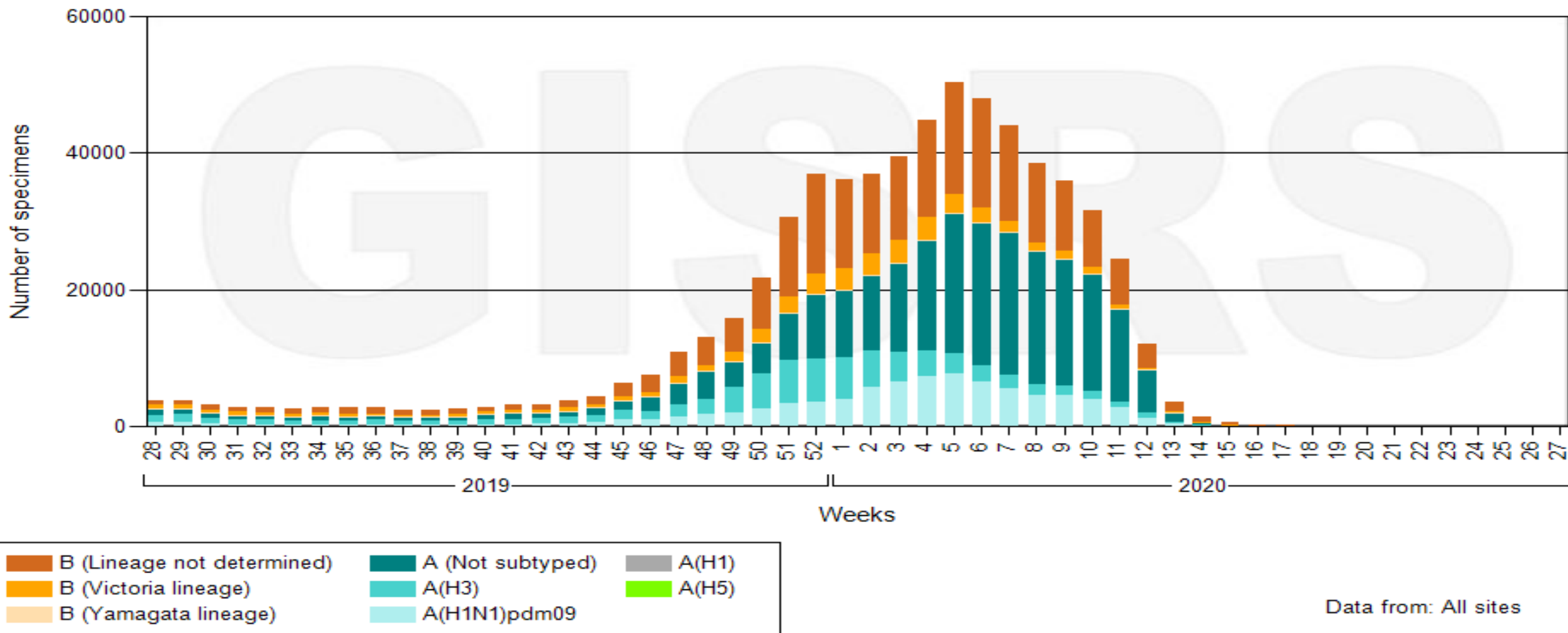
- Vaccination is an effective way to prevent infection and severe outcomes caused by influenza viruses.
- Vaccination is especially important for people at higher risk of serious influenza complications, and for people who live with or care for high risk individuals. WHO recommends seasonal influenza vaccination for the following individuals:

Highest priority:

- Pregnant women
- **Priority (in no particular order):**
- Children aged 6-59 months
- Elderly
- Individuals with specific chronic medical conditions
- Health-care workers

Influenza Global Circulation

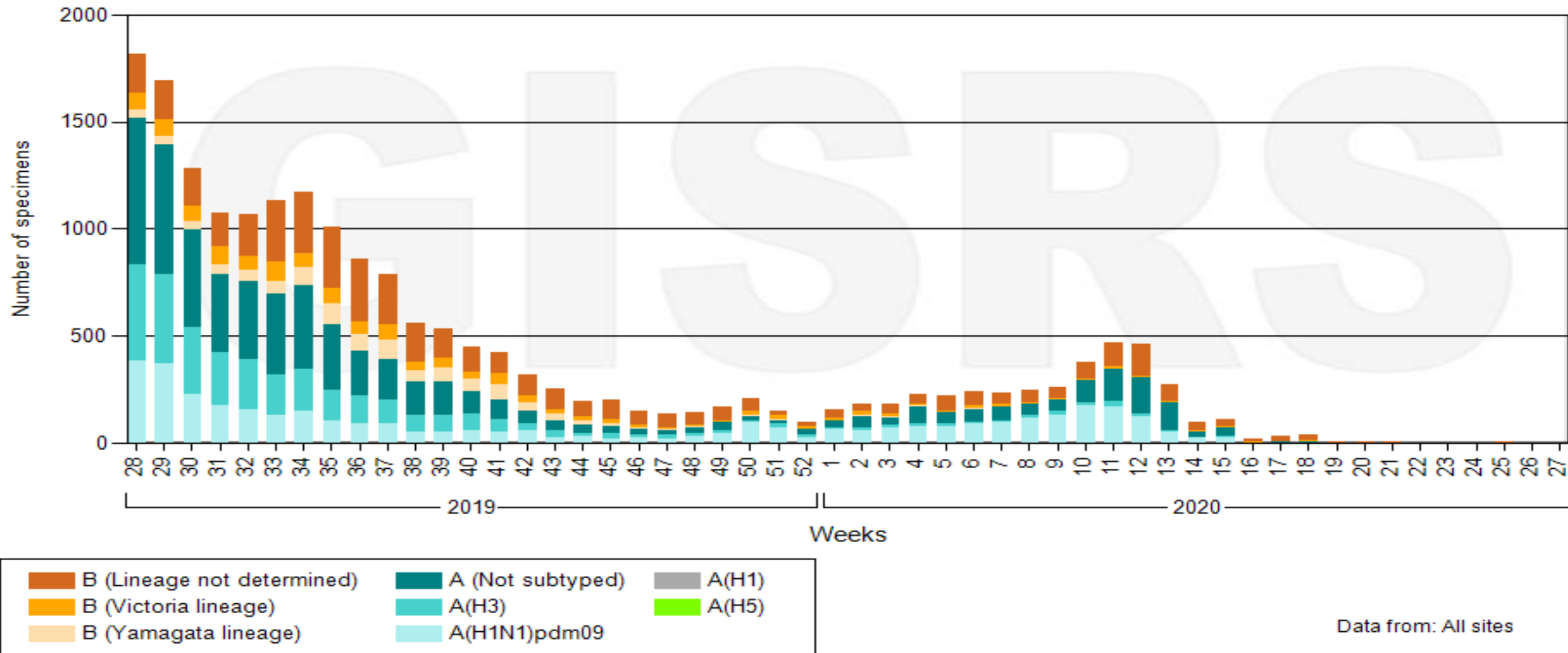
Number of specimens positive for influenza by subtype



Data as of (4-June-2020)

Southern hemisphere

Number of specimens positive for influenza by subtype

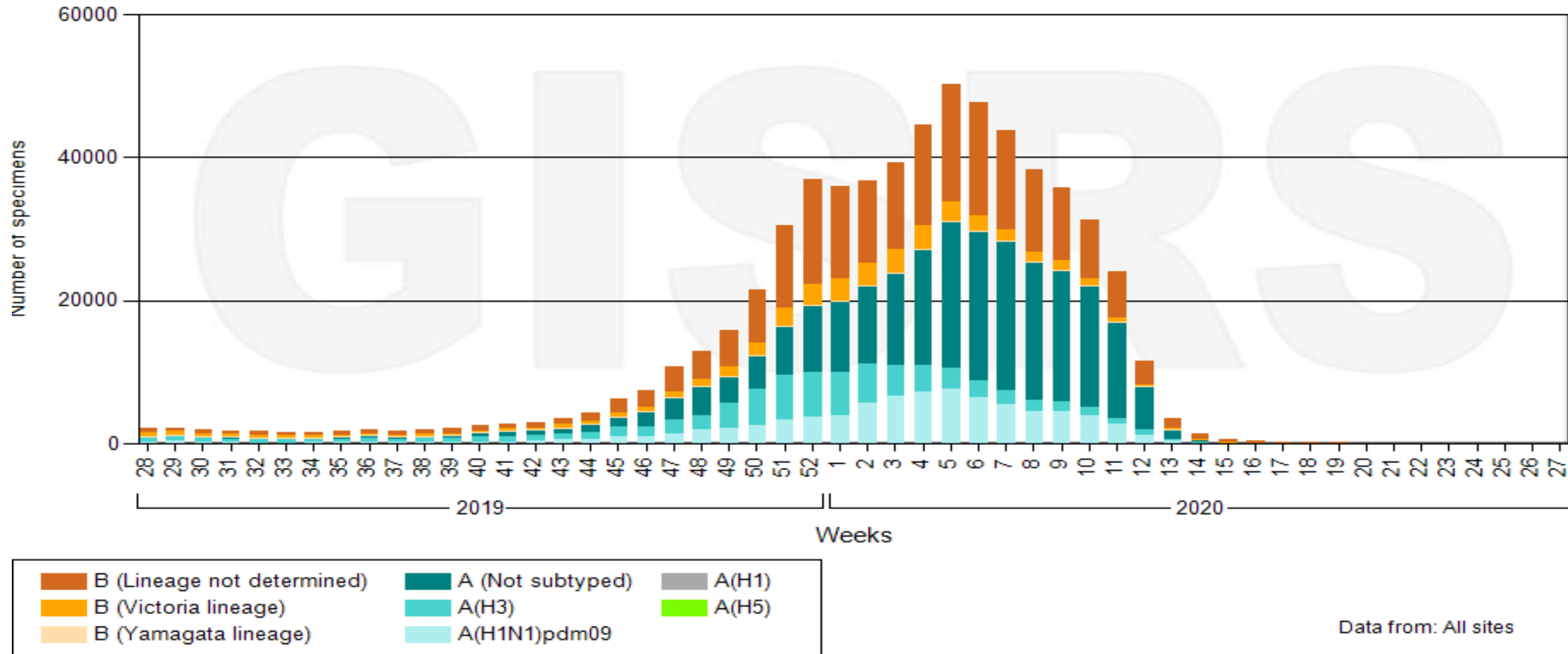


Data as of (4-June-2020)

Data from: All sites

Northern hemisphere

Number of specimens positive for influenza by subtype

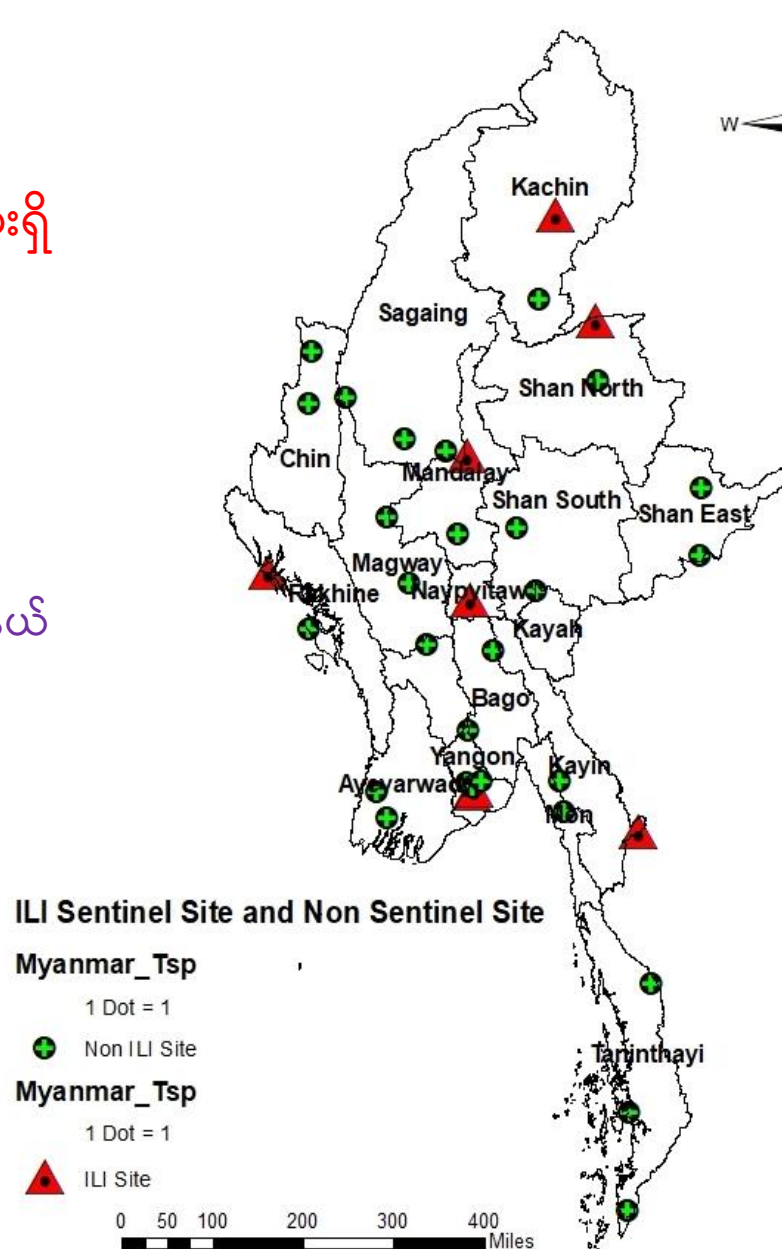


Data as of (4-June-2020)

ILI/SARI sentinel surveillance sites and Non Sentinel Sites

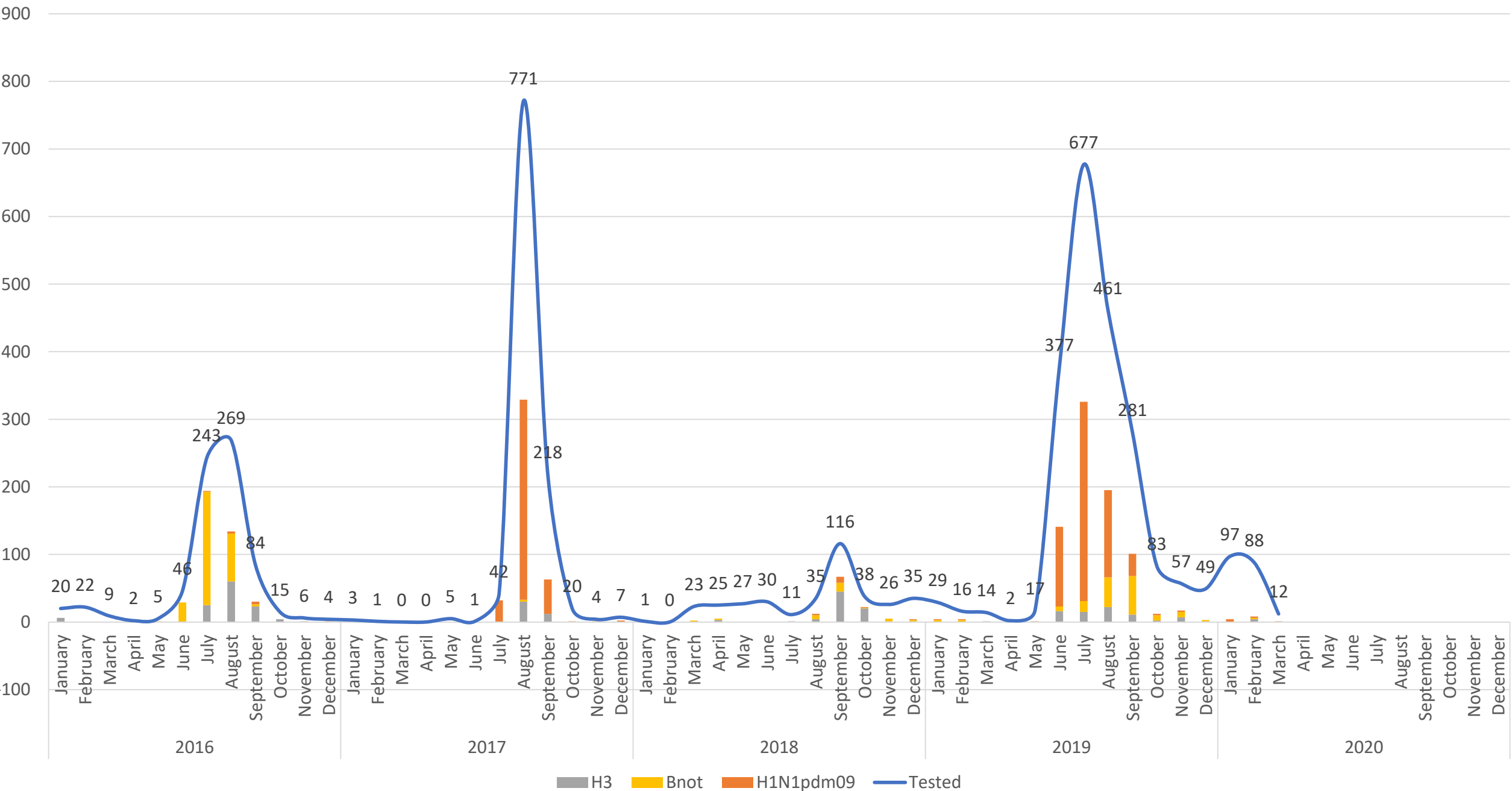
ပြည်နယ်တိုင်း (၇)ခုတွင်
Sentinel Site ဆေးရုံ (၈)ရုံ ထားရှိ
ပြီးဆောင်ရွက်လျက်ရှိပါသည်။

ILI/SARI GP Site (၂)ခု အဖြစ်
-ရန်ကုန်တိုင်း- သာကေတ မြို့နယ်
-မန္တလေးတိုင်း- ချမ်းအေးသာစံမြို့နယ်
တွင်တည်ရှိပါသည်။



- Naypyidaw 1000 Bedded Hospital
- Yangon General Hospital
- Yangon Thingangyun Hospital
- Mandalay General Hospital
- Myitkyina General Hospital
- Sittwe General Hospital
- Myawaddy Township Hospital
- Muse Township Hospital

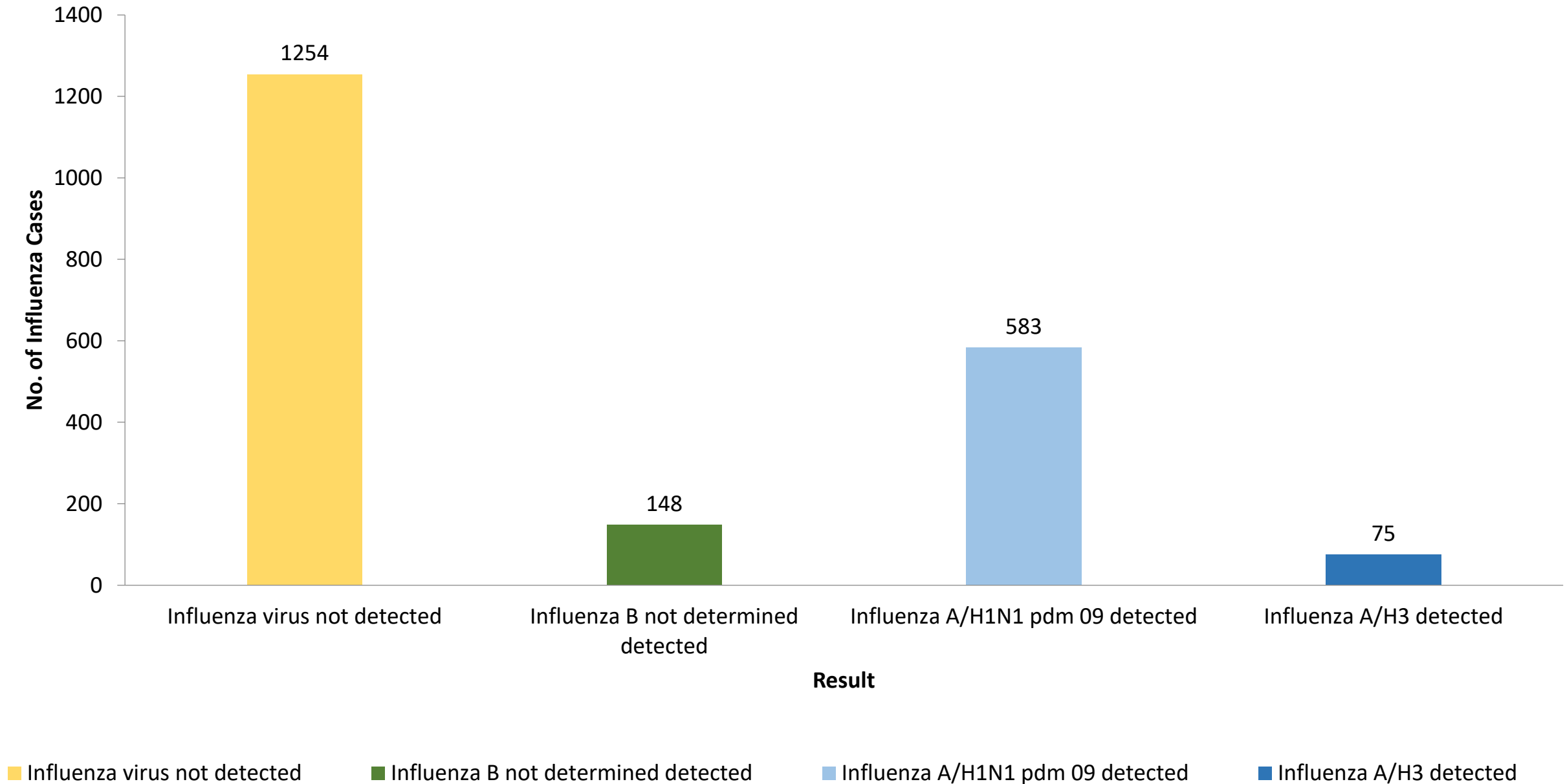
Influenza Lab Confirmed Cases in Myanmar (2016 to 2020)



Influenza lab confirmed result and Death cases in 2019

No	Result	Postive	Death
1	A/H1N1	583	118
2	B not determined	148	4
3	A/H3	75	6
	Total	806	128

ILI/SARI Lab Confirmed Cases 2019 (Total Test=2060)



Seasonal Influenza Death in 2019

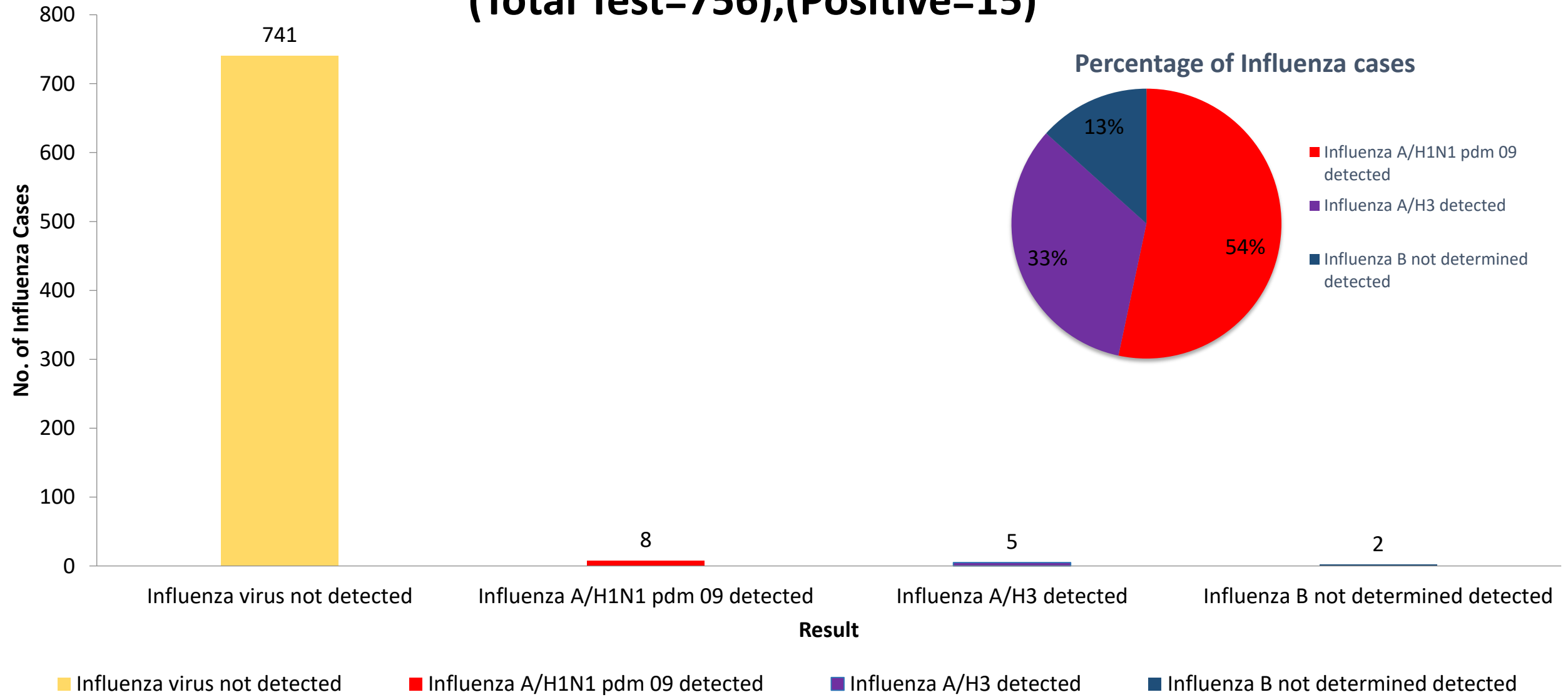
Seasonal influenza with co-morbid conditions	94	79.66%
High risk group for seasonal influenza	15	12.93%
Seasonal influenza A (H1N1)pdm09 without obvious co-morbid conditions	9	7.76 %
Total	118	

Influenza lab confirmed result and Death cases in 2020

No	Result	Postive	Death
1	A/H1N1	8	0
2	A/H3	5	0
3	B not determined	2	0
	Total	15	0

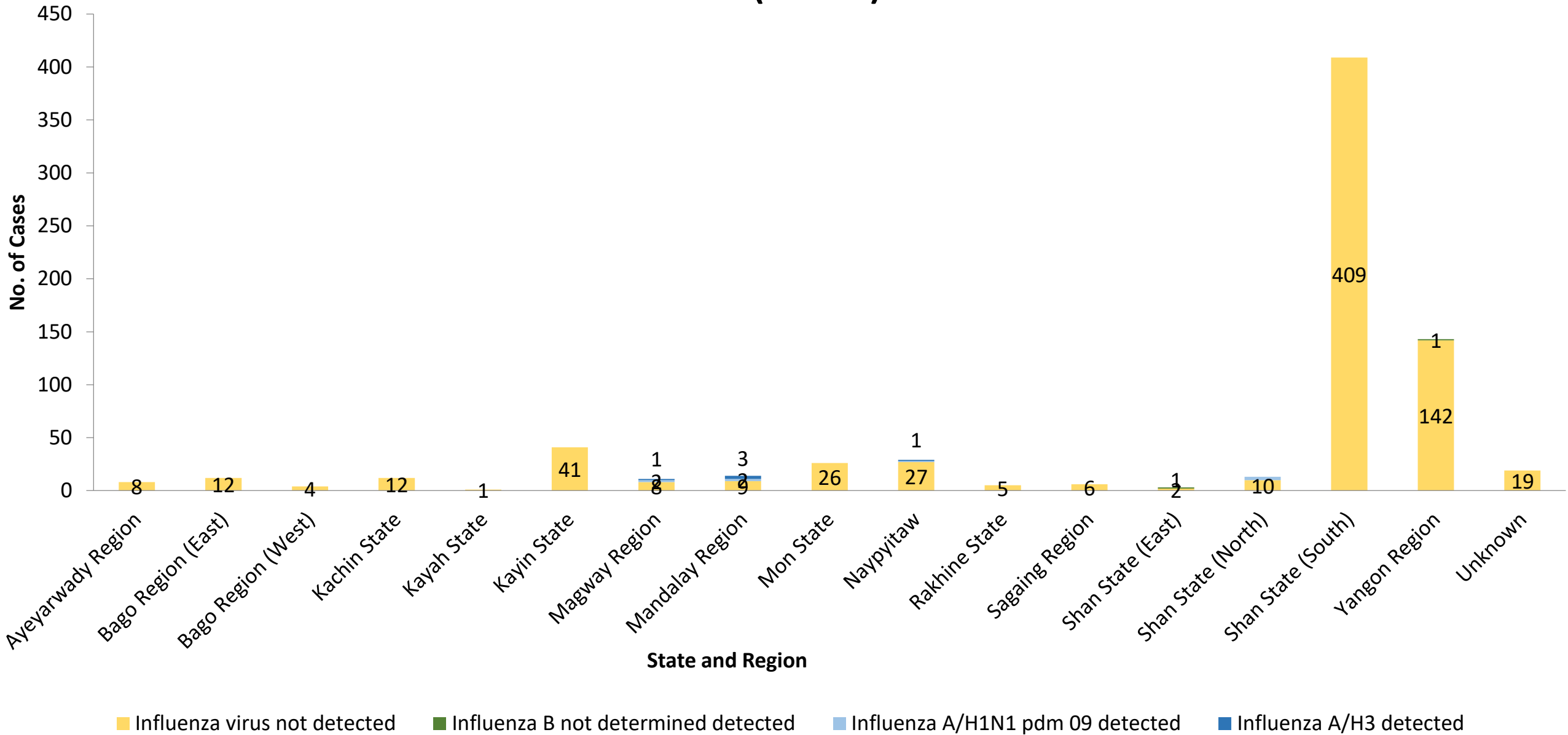
ILI/SARI Lab Confirmed Result 2020

(Total Test=756),(Positive=15)



Influenza lab confirmed Result according to State & Region (2020)

(N=756)



Recommended composition of influenza virus vaccines for use in the 2020 - 2021 southern hemisphere influenza season

	Quadrivalent vaccines	Trivalent influenza vaccines
Egg-based Vaccines	<ul style="list-style-type: none"> - an A/Guangdong-Maonan/SWL1536/2019 (H1N1)pdm09-like virus; - an A/Hong Kong/2671/2019 (H3N2)-like virus; - a B/Washington/02/2019 (B/Victoria lineage)-like virus; and - a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus. 	<ul style="list-style-type: none"> - an A/Guangdong-Maonan/SWL1536/2019 (H1N1)pdm09-like virus; - an A/Hong Kong/2671/2019 (H3N2)-like virus; and - a B/Washington/02/2019 (B/Victoria lineage)-like virus.
Cell- or recombinant-based Vaccines	<ul style="list-style-type: none"> - an A/Hawaii/70/2019 (H1N1)pdm09-like virus; - an A/Hong Kong/45/2019 (H3N2)-like virus; - a B/Washington/02/2019 (B/Victoria lineage)-like virus; and - a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus. 	<ul style="list-style-type: none"> - an A/Hawaii/70/2019 (H1N1)pdm09-like virus; - an A/Hong Kong/45/2019 (H3N2)-like virus; and - a B/Washington/02/2019 (B/Victoria lineage)-like virus.



COVID-19 in Myanmar (2020)



Compare and contrast between COVID-19 and Influenza

	<u>COVID-19</u>	<u>Influenza viruses</u>
Transmission	Droplet infection	Droplet infection
Presentation	Respiratory symptoms	Respiratory symptoms
Medium Incubation period	More longer	Shorter
Spread of infection	Slower	Faster
Reproductive number(R0)	2 to 2.5	0.9 to 2
Age group	Children are less affected	Children are more affected
Disease severity	More severe	Less severe
Mortality	Higher	Lower
Vaccine	(-)	(+)

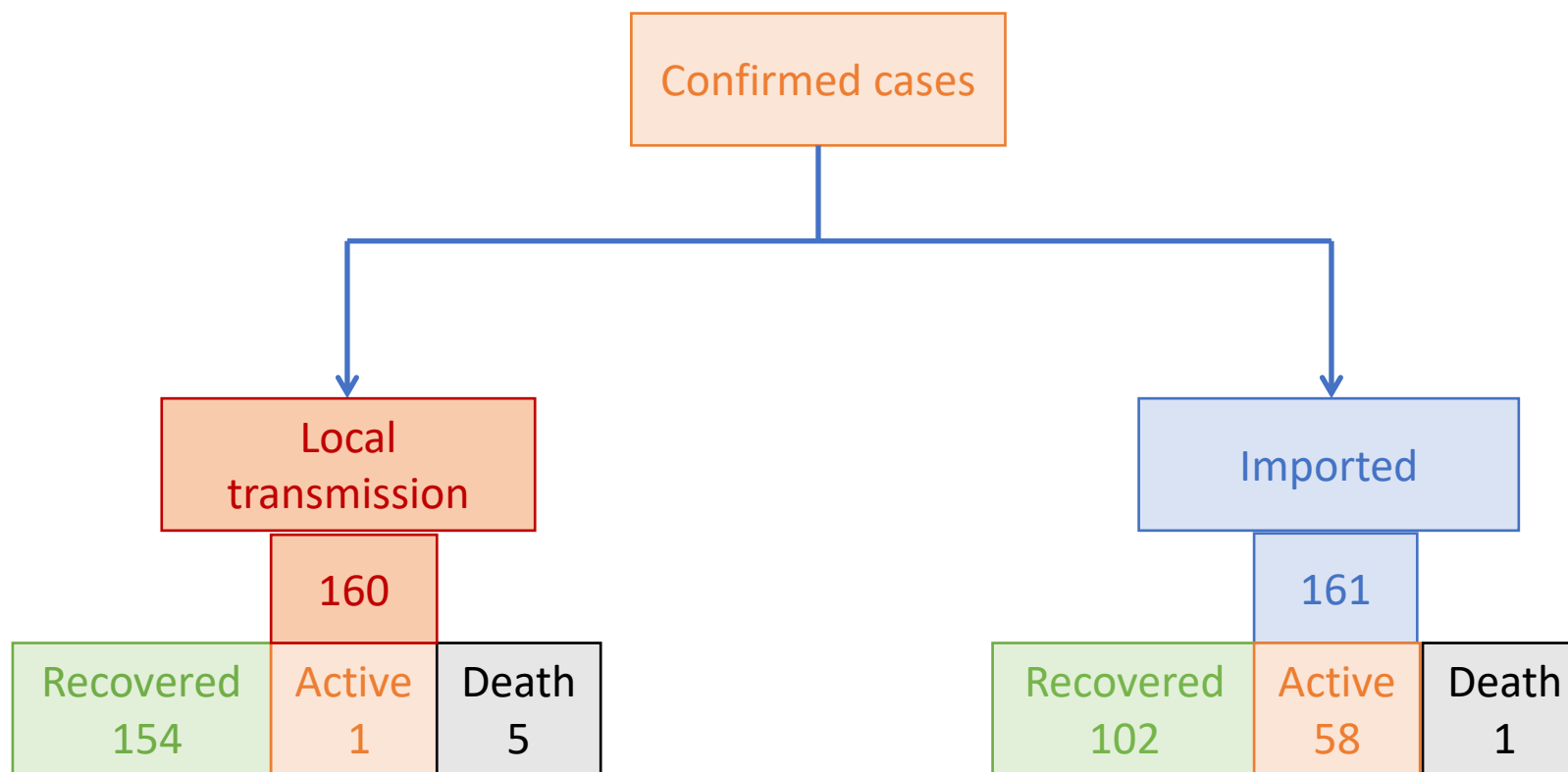


COVID-19 confirmed cases and death by State/Region (23.3.2020 – 9-7-2020) , n=321

No.	State/Region	Confirmed case	Recovered	Deaths	Active cases
1.	Yangon	229 (3 new)	178	5	46
2.	Kayin	26	21 (1 New)	-	6
3.	Rakhine	12	9 (1 New)	-	4
4.	Chin	11	10	-	1
5.	Sagaing	9	8	-	1
6.	Bago	9	7	1	1
7.	Shan(South)	4	4	-	0
8.	Shan(East)	3	3	-	0
9.	Mandalay	3	3	-	0
10.	Shan(North)	3	3	-	0
11.	Magway	3	3	-	0
12.	Naypyitaw	2	2	-	0
13.	Ayeyarwaddy	2	2	-	0
14.	Kachin	2	2	-	0
15.	Mon	2	2	-	0
16.	Thanintharyi	1	1	-	0
17.	Kayar	-	-	-	-
Total		321 (3 new)	256 (2 new)	6	59

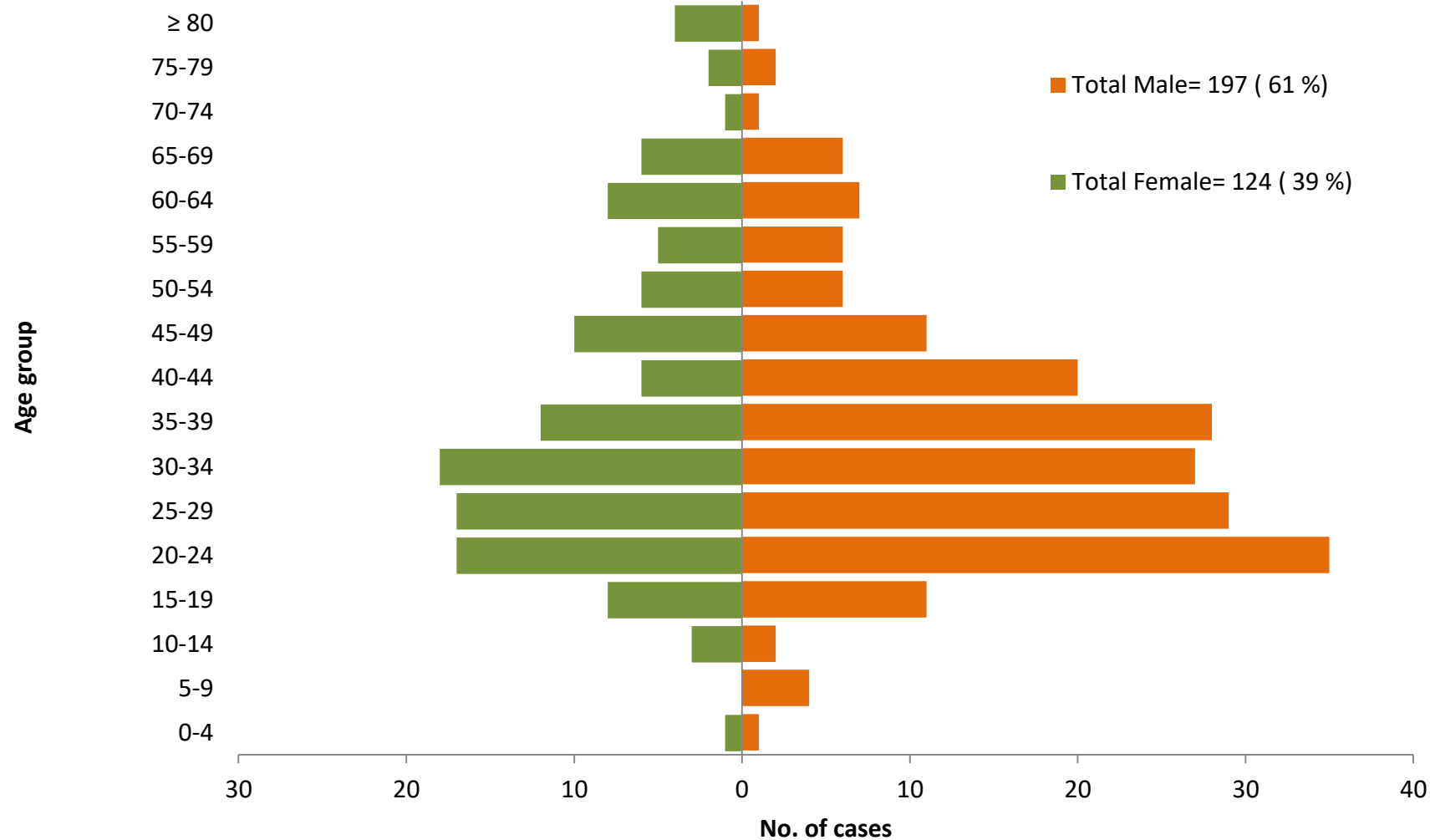


Types of transmission of COVID-19 confirmed cases (23.3.2020-9.7.2020), n= 321



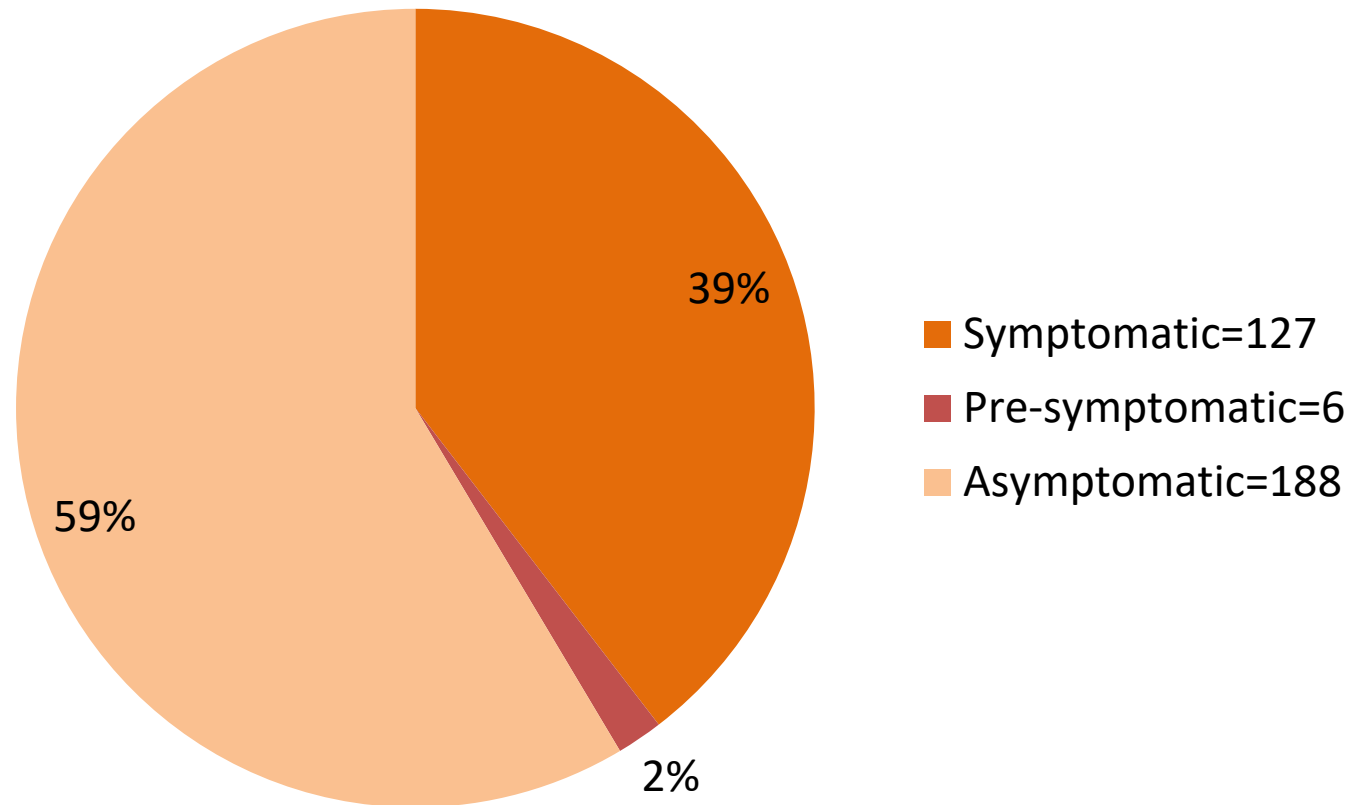


COVID-19 confirmed cases by age group (23.3.2020 – 9-7-2020) n= 321



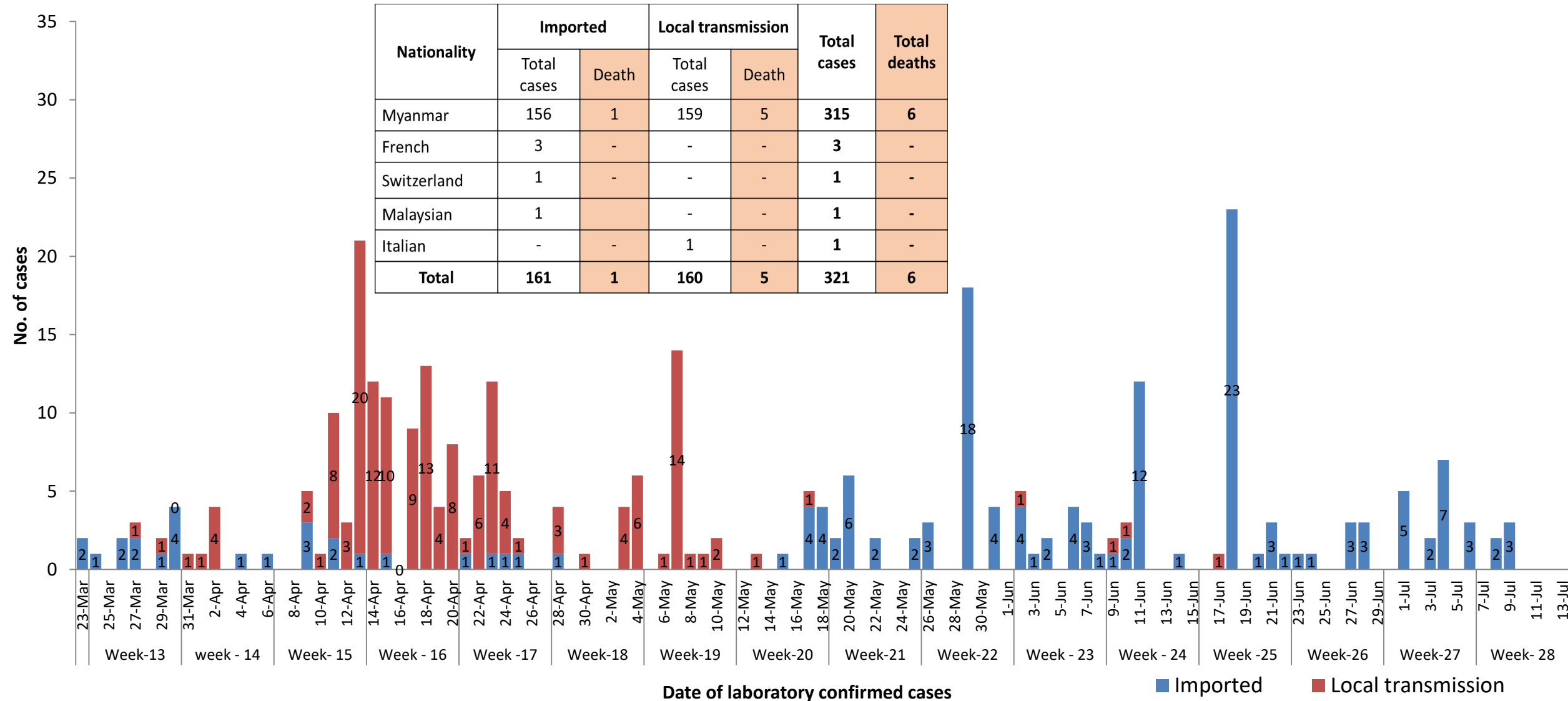


Presentation of confirmed cases (23.3.2020 – 9-7-2020), n= 321



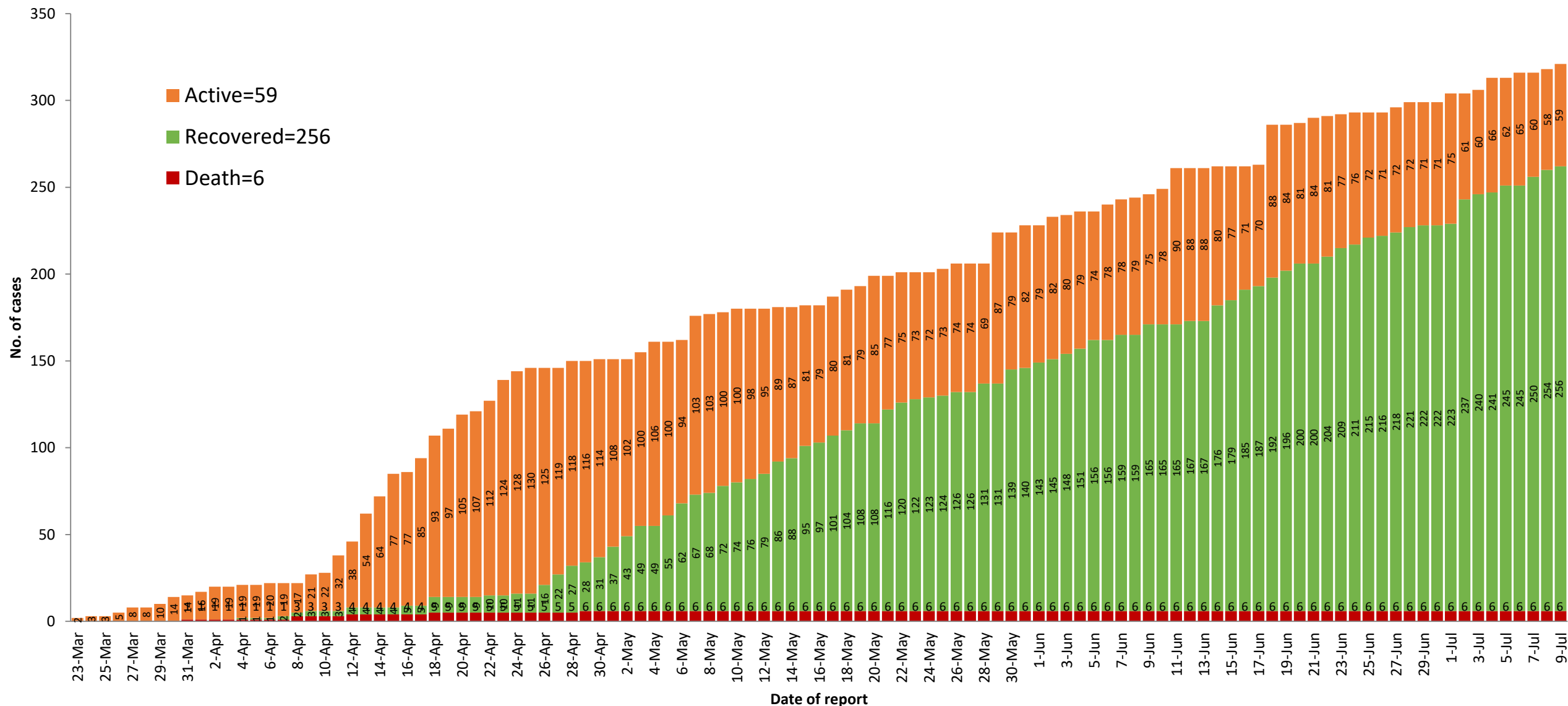


Types of COVID-19 confirmed cases by date of laboratory confirmed (23.3.2020 – 9-7-2020),n=321





Cumulative confirmed, active cases , recovered and death by date (23.3.2020 – 9-7-2020),n (cumulative)=321





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