Respiratory Virus Surveillance in the WHO African Region

Epidemiological Week 4, January 22 to 28, 2024



Influenza

During Epidemiological week (Epiweek) 4, 20 countries from the 5 influenza transmission zones¹ in the WHO African region (WHO AFR) contributed virological data for analysis - Algeria, Burkina Faso, Cameroon, Central African Republic, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Madagascar, Mali, Mozambique, Niger, Rwanda, Senegal, South Africa, Togo, Uganda, United Republic of Tanzania, and Zambia. During Epiweek 4, 1,296 specimens were collected, and 1,268 were tested for influenza.

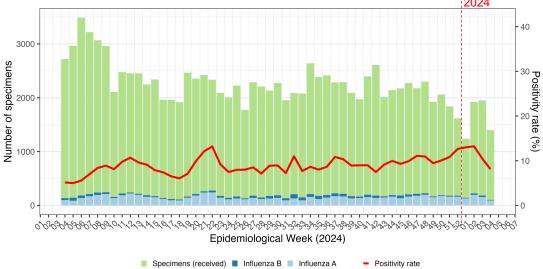


Figure 1. Epicurve of influenza cases in WHO AFR countries, areas and territories by influenza type.

Week 4 Data for Sentinel Surveillance						
		Influenza		SARS CoV-2		
Specimens tested		1,268		1,126		
Specimens positive		103		72		
Regional percent positivity		8.1%		6.4%		
Cumulative Sentinel Surveillance Data for 2024						
		Influenza		SARS CoV-2		
Specimens tested	5,799			5,281		
Specimens positive	652			305		
Percent positivity		11.2%		5.8%		

In Epiweek 4, 103 specimens tested positive for influenza virus (positivity of 8.1%), of which 94 specimens were Influenza A, and 9 specimens were Influenza B. The following influenza viruses were identified: Influenza A (H1N1)pdm09 (n = 40), Influenza A (H3) (n = 53), Influenza A (subtyping not performed) (n=1), Influenza B (lineage not determined) (n = 4), and Influenza B (Victoria) (n = 5) (Figure 1).

Data is collected by the AFRO sentinel surveillance network, However, sometimes non-sentinel data is also reported. All data is preliminary

^{1.} https://www.who.int/publications/m/item/influenza_transmission_zones

Figure 2.

African Region

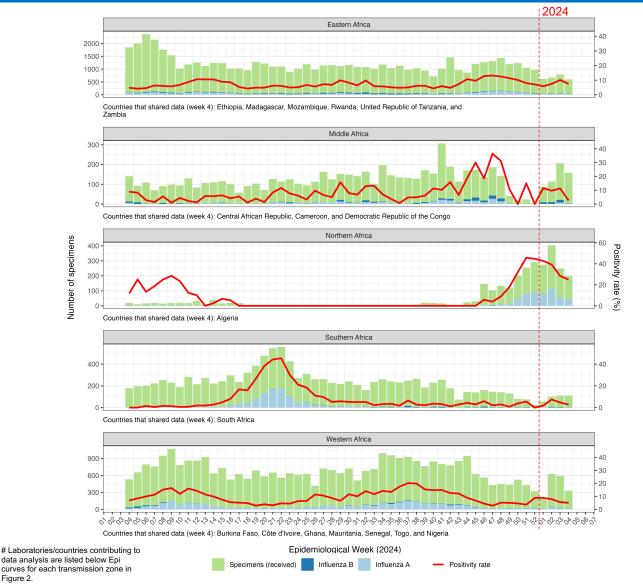


Figure 2. Epicurve of influenza cases in WHO AFR transmission zones

- In the **Eastern Transmission Zone**, 559 specimens were collected and 532 tested for influenza by 6 laboratories#. Forty (40) specimens tested positive for influenza virus, with a positivity rate of 7.5% (Figure 2). Influenza types and subtypes identified in the zone included: A(H1N1)pdm09 (n = 4), A(H3) (n = 30), A(subtyping not performed) (n=1)B(lineage not determined) (n = 4), and B(Victoria) (n = 1). In this transmission zone all 6 countries collected >20 specimens and 3/6 countries had positivity rates >10% (± 1%): Mozambique, 10%; Rwanda 20.5%; and Tanzania 9.6% with A/H3 continuing to predominate.
- In the Middle Transmission Zone, 154 specimens were collected and tested for influenza by 3 laboratories[#]. Four (4) specimens tested positive for influenza virus, giving a subregional positivity rate of 2.6% (Figure 2). Once again all positive specimens originated from Cameroon with a reduced positivity rate (4%) compared to week 3. Influenza types and subtypes identified in Cameroon included: A(H1N1)pdm09 (n = 1), A(H3) (n = 2), and B(Victoria) (n = 1).
- In the Northern Transmission Zone, 160 specimens were collected and tested for influenza by the laboratory in Algeria. Forty (40) specimens tested positive for influenza virus, with a positivity rate of 25%, a decrease from week 3 (28.5%). (Figure 2). Influenza types and subtypes identified included: A(H1N1)pdm09 (n = 33) and A(H3) (n = 7).
- In the Southern Transmission Zone, 108 specimens were collected and 107 tested for influenza by the laboratory in South Africa. Three (3) specimens tested positive for influenza virus, with a positivity rate of 2.8% (Figure 2). Influenza B Victoria (n=2) and Influenza A(H1N1)pdm09 (n = 1), were detected in the South Africa this week.
- In the Western Transmission Zone, 315 specimens were collected tested from 6 laboratories#. Sixteen (16) specimens tested positive for influenza virus, with a subregional positivity rate of 5.1% (Figure 2). Influenza types and subtypes identified included: A(H1N1)pdm09 (n = 1), A(H3) (n = 14), and B(Victoria) (n=1). The majority of influenza positive specimens were collected in Mauritania where the positivity rate was high (10/25, 40%).



SARS CoV-2

In Epiweek 4, 72 specimens tested positive for SARS-CoV-2 (positivity of 6.4%), of the 1,126 specimens processed by 15 laboratories regionally. (Figure 3).

Cumulatively, from weeks 1 to 4, the WHO AFR influenza laboratory network has tested 5,281 sentinel surveillance specimens for SARS-CoV-2, of which 305 were positive for SARS-CoV-2 (cumulative regional positivity rate 5.8%) (Figure 3).

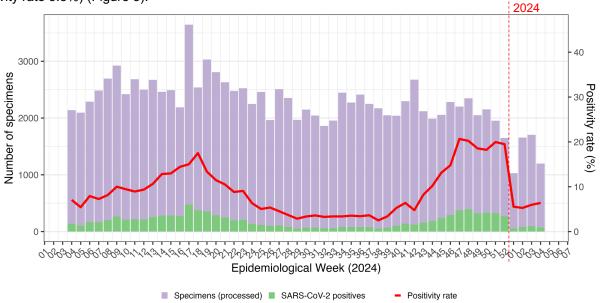


Figure 3. Epicurve of SARS CoV-2 cases from sentinel surveillance in WHO AFR region.

Summary Data for SARS CoV-2 – Week 4							
Transmission Zone	Specimens Tested		SARS CoV-2 positive	Transmission Zone % positivity			
Eastern^	489		26	5.3%			
Middle^	54		0	0%			
Northern	160		26	16.25%			
Southern	107		1	0.93%			
Western^	316		19	6%			
Cumulative Sentinel Surveillance Data for SARS CoV-2, 2024							
Transmission Zone Sp		Sp	ecimens Tested	SARS CoV-2 positive			
Eastern^		2,260		112			
Middle^		184		0			
Northern		835		97			
Southern		363		10			
Western^		1,639		86			

^More than one country contributes to the weekly and cumulative data. Countries contributing are listed under the epi curves for each transmission zone.



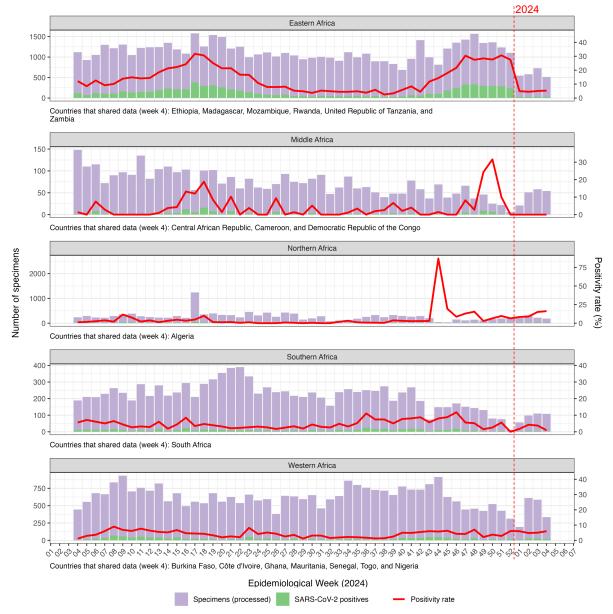


Figure 4. Epicurves of SARS CoV-2 cases from sentinel surveillance specimens in WHO AFR transmission zones

- An average of 75 specimens were tested by each laboratory (Range 12 160). Six countries tested over 100 specimens.
- Positivity rates for SARS CoV-2 exceeded 5% (± 1%) in the following countries: Ethiopia (9.7%), Algeria (16.3%), Mauritania (7.7%) that tested >20 specimens. The high positivity in SARS CoV-2 was concurrent with an elevated positivity rate for influenza in Algeria.
- 9 countries (>20 specimens tested): Burkina Faso, Cote d'Ivoire, Democratic Republic of Congo, Ghana, Madagascar, Mozambique, Rwanda, South Africa and Tanzania had positivity rates between 0 and 5% (± 1%).
- The majority of countries in the region reporting to the GISRS are reporting positivity rates of 5% or less.

