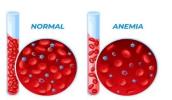
# WEEKLY EPIDEMIOLOGY BULLETIN NATIONAL SURVEILLANCE UNIT, MINISTRY OF HEALTH & WELLNESS, JAMAICA

## Weekly Spotlight

## **Anaemia** (Part 3)



## **Treatment and prevention**

The treatment and prevention of anaemia depend on the underlying cause of the condition. There are many effective ways to treat and prevent anaemia. Changes in diet can help reduce anaemia in some cases, including:

• eating foods that are rich in iron, folate, vitamin B12, vitamin A, and other nutrients

eating a healthy diet with a variety of foods

taking supplements if a qualified health-care provider recommends them. Other health conditions can cause anaemia. Actions include:

- prevent and treat malaria
- prevent and treat schistosomiasis and other infections caused by soiltransmitted helminths (parasitic worms)
- get vaccinated and practice good hygiene to prevent infections
- manage chronic diseases like obesity and digestive problems •
- wait at least 24 months between pregnancies and use birth control to . prevent unintended pregnancies
- prevent and treat heavy menstrual bleeding and haemorrhage before or after birth
- delay umbilical cord clamping after childbirth (not earlier than 1 minute)
- treat inherited red blood cell disorders like sickle-cell disease and thalassemia.

#### Self-care

There are several ways to help prevent and manage anaemia in daily life, including eating a healthy and diverse diet and speaking to a health-care provider early if you have symptoms of anaemia. To keep a healthy and diverse diet:

- eat iron-rich foods, including lean red meats, fish and poultry, legumes (e.g. lentils and beans), fortified cereals and dark green leafy vegetables;
- eat foods rich in vitamin C (such as fruits and vegetables) which help the . body absorb iron; and
- avoid foods that slow down iron absorption when consuming iron-rich foods, such as bran in cereals (wholewheat flour, oats), tea, coffee, cocoa and calcium.

If you take calcium and iron supplements, take them at different times during the day. People with heavy menstrual bleeding should see their doctor for treatment. Doctors may recommend iron supplements or hormonal contraceptives. Some infections can cause anaemia. Wash your hands with soap and water and use clean toilets to reduce the risk of infection. Malaria can also cause anaemia. People living in places where malaria is common should follow prevention advice from local health authorities. Seek prompt treatment if you suspect you have malaria.

Taken from WHO website on 10/February/2025 https://www.who.int/news-room/fact-sheets/detail/anaemia https://healthinfo.healthengine.com.au/anaemia-during-pregnancy-types-causes-treatments (picture)



FPI

Accidents

**Class 1 Notifiable** 

WEEK 5

Violence

Pages 2-4

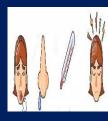
Events

Page 5





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Influenza

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Page 8

**Dengue Fever** 

**Research Paper** 

Page 9



re-sear

## Sentinel Surveillance in Jamaica



Table showcasing the Timeliness of Weekly Sentinel Surveillance Parish Reports for the Four Most Recent Epidemiological Weeks – 2 to 5 of 2025

Parish health departments submit reports weekly by 3 p.m. on Tuesdays. Reports submitted after 3 p.m. are considered late.

#### KEY:

Yellow- late submission on Tuesday Red – late submission after Tuesday A syndromic surveillance system is good for early detection of and response to public health events.

Sentinel surveillance occurs when selected health facilities (sentinel sites) form a network that reports on certain health conditions on a regular basis, for example, weekly. Reporting is mandatory whether or not there are cases to report.

Jamaica's sentinel surveillance system concentrates on visits to sentinel sites for health events and syndromes of national importance which are reported weekly (see pages 2 -4). There are seventy-eight (78) reporting sentinel sites (hospitals and health centres) across Jamaica.

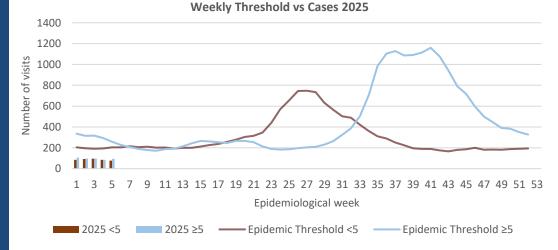
Epi week	Kingston and Saint Andrew	Saint Thomas	Saint Catherine	Portland	Saint Mary	Saint Ann	Trelawny	Saint James	Hanover	Westmoreland	Saint Elizabeth	Manchester	Clarendon
	2025												
2	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
3	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
4	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
5	On	On	On	On	On	On	On	On	On	On	On	On	On
	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time

## REPORTS FOR SYNDROMIC SURVEILLANCE

## UNDIFFERENTIATED FEVER

Temperature of  $>38^{\circ}C$ /100.4°F (or recent history of fever) with or without an obvious diagnosis or focus of infection.





Weekly Visits to Sentinel Sites for Undifferentiated Fever All ages: Jamaica,

2 NOTIFICATIONS-All clinical sites

NS-

INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued

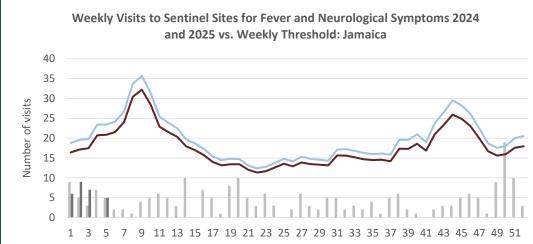




## February 14, 2025

## FEVER AND NEUROLOGICAL

Temperature of >38°C /100.4°F (or recent history of fever) in a previously healthy person with or without headache and vomiting. The person must also have meningeal irritation, convulsions, altered consciousness, altered sensory manifestations or paralysis (except AFP).



Epidemiological week

Epidemic Threshold

Epidemic Threshold

- Alert Threshold

Weekly visits to Sentinel Sites for Fever and Haemorrhagic 2024 and 2025 vs

Weekly Threshold; Jamaica

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## FEVER AND HAEMORRHAGIC

Temperature of >38°*C* /100.4°*F* (or recent history of fever) in a previously healthy person presenting with at least one haemorrhagic (bleeding) manifestation with or without jaundice.



## **FEVER AND JAUNDICE**

Temperature of  $>38^{\circ}C/100.4^{\circ}F$ (or recent history of fever) in a previously healthy person presenting with jaundice.

The epidemic threshold is used to confirm the emergence of an epidemic in order to implement control measures. It is calculated using the mean reported cases per week plus 2 standard deviations.



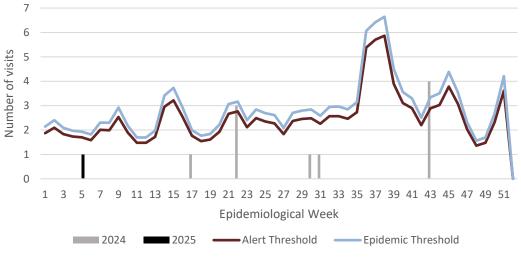
3 NOTIFICATIONS-All clinical sites

Fever and Jaundice cases: Jamaica, Weekly Threshold vs Cases 2024 and 2025

Epidemiological week

- Alert Threshold

13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events

2024

7

6

5

4

3

2

1 0

1 3

Number of visits

2025

11

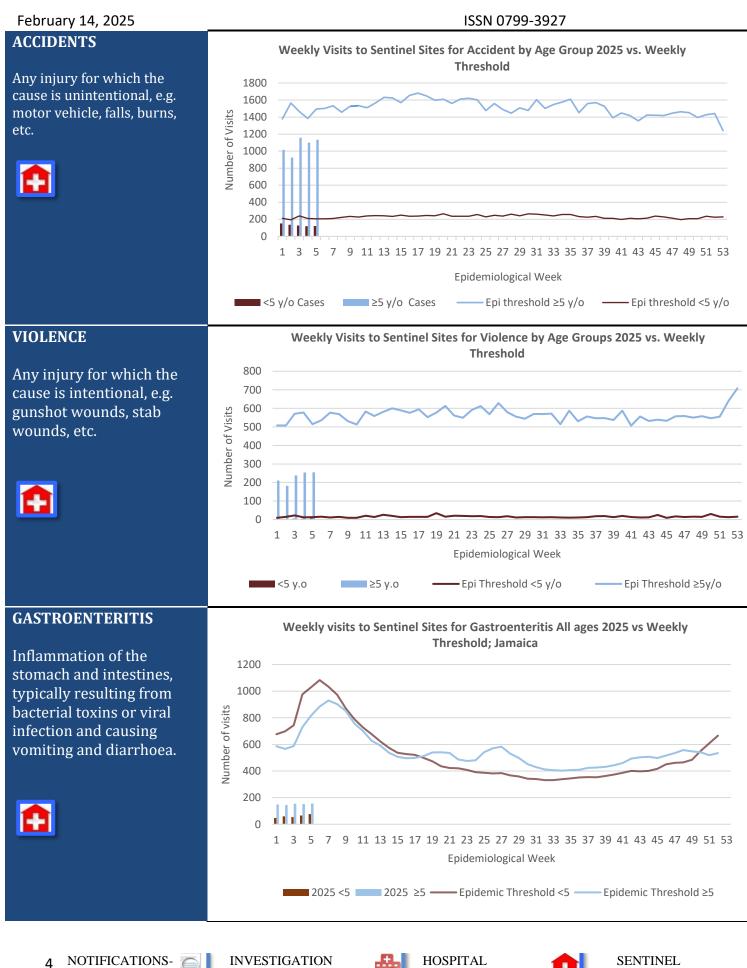
2025

2024

HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued







All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



ACTIVE SURVEILLANCE-30 sites. Actively pursued



#### ISSN 0799-3927

## CLASS ONE NOTIFIABLE EVENTS

## Comments

			Confirm	ed YTD <sup><math>\alpha</math></sup>	AFP Field Guides from	
	CLASS 1 EVENTS		CURRENT YEAR 2025	PREVIOUS YEAR 2024	WHO indicate that for an effective surveillance system, detection rates for	
	Accidental Po	bisoning	5 <sup>β</sup>	37 <sup>β</sup>	AFP should be 1/100,000	
NATIONAL /INTERNATIONAL INTEREST	Cholera		0	0	population under 15 years old (6 to 7) cases annually.	
	Severe Dengu	ie <sup>v</sup>	See Dengue page below	See Dengue page below	olu (0 to 7) cases annually.	
	COVID-19 (S	SARS-CoV-2)	11	89	Pertussis-like syndrome and	
	Hansen's Dis	ease (Leprosy)	0	0	Tetanus are clinically	
L /INTERN	Hepatitis B		0	6	confirmed classifications.	
LNI VTV	Hepatitis C		0	1	YDengue Hemorrhagic	
ONA	HIV/AIDS		NA	NA	Fever data include Dengue	
ATI	Malaria (Imp	ported)	0	0	related deaths;	
Z	Meningitis		1	0	$^{\delta}$ Figures include all deaths	
	Monkeypox		0	0	associated with pregnancy	
EXOTIC/ UNUSUAL	Plague		0	0	reported for the period.	
'Y' IY	Meningococc	al Meningitis	0	0	<sup>ε</sup> CHIKV IgM positive cases	
GH	Neonatal Teta	anus	0	0	$^{\theta}$ Zika PCR positive cases	
H IGH Morbidity, Mortality	Typhoid Feve	er	0	0	<sup><math>\beta</math></sup> Updates made to prior weeks.	
MC	Meningitis H	/Flu	0	0		
	AFP/Polio		0	0	$^{\alpha}$ Figures are cumulative totals for all epidemiological	
	Congenital R	ubella Syndrome	0	0	weeks year to date.	
	Congenital Sy	yphilis	0	0		
MES	Fever and Rash	Measles	0	0		
RAMI		Rubella	0	0		
(DO	Maternal Deaths <sup><math>\delta</math></sup>		7	7		
SPECIAL PROGRAM	Ophthalmia N	Veonatorum	0	22		
	Pertussis-like	syndrome	0	0		
	Rheumatic Fe	ever	0	0		
	Tetanus		0	0		
	Tuberculosis		0	9		
	Yellow Fever		0	0		
	Chikungunya	ε	0	0		
	Zika Virus <sup>θ</sup>			0	NA- Not Available	

NOTIFICATIONS-5 All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued





## February 14, 2025

## **COVID-19 Surveillance Update**

CASES	EW 5	Total		
Confirmed	1	157446		
Females	1	90717		
Males	0	66726		
Age Range	49 years	1 day to 108 years		

\* 3 positive cases had no gender specification

\* PCR or Antigen tests are used to confirm cases

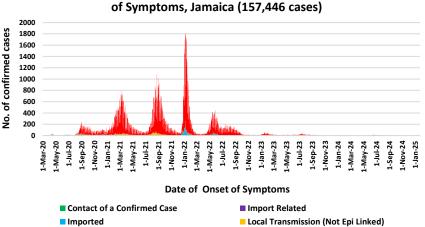
\* Total represents all cases confirmed from 10 Mar 2020 to the current Epi-Week.

## COVID-19 Outcomes

Outcomes	EW 5	Total			
ACTIVE *2 weeks*		5			
DIED – COVID Related	0	3875			
Died - NON COVID	0	396			
Died - Under Investigation	0	142			
Recovered and discharged	0	103226			
Repatriated	0	93			
Total		157446			
*Vaccination programme March 2021 - VTD					

# **Classification of Confirmed COVID-19 Cases by Date of Onset**

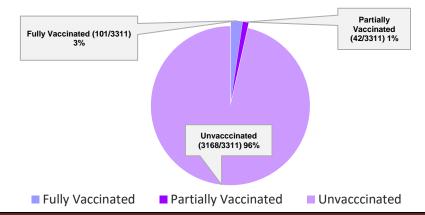
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Under Investigation

Local Transmission (Not Epi Linked) Workplace Cluster

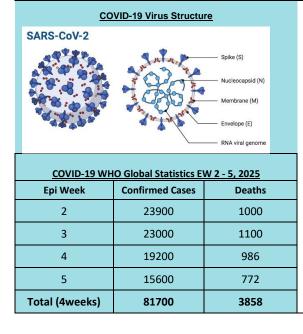
3311 COVID-19 Related Deaths since March 1, 2021 - YTD **Vaccination Status among COVID-19 Deaths** 

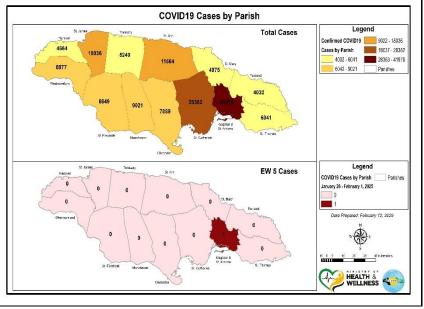


Vaccination programme March 2021 – YTD

\* Total as at current Epi week

## COVID-19 Parish Distribution and Global Statistics





NOTIFICATIONS-6 All clinical



**INVESTIGATION** REPORTS- Detailed Follow up for all Class One Events



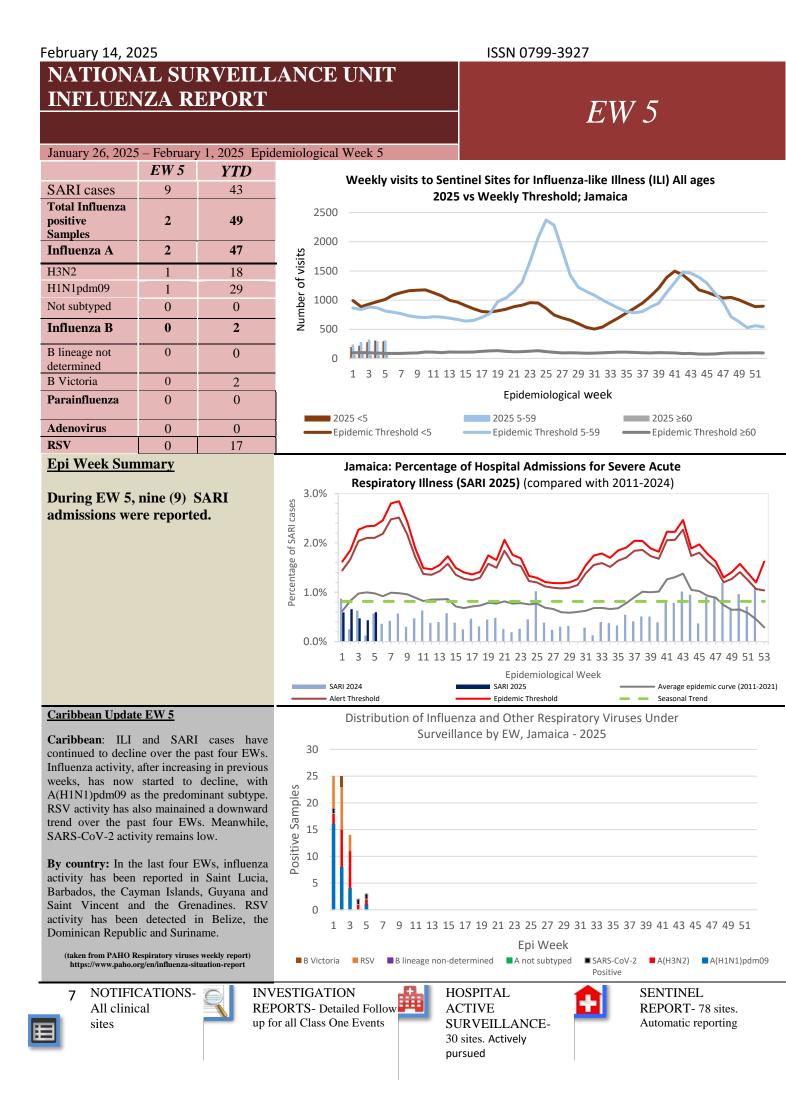
HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



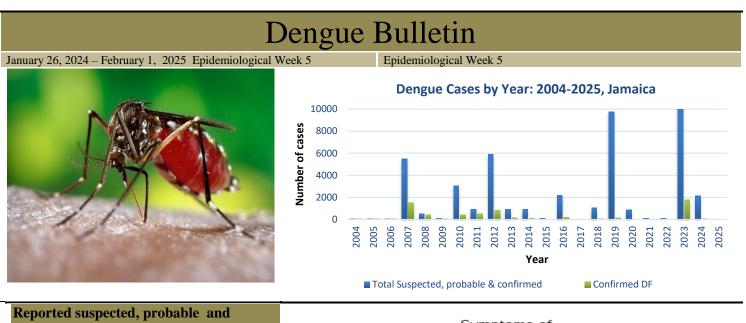
SENTINEL REPORT- 78 sites. Automatic reporting



sites



ISSN 0799-3927



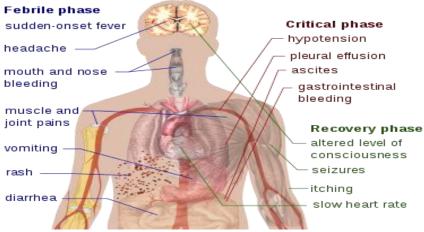
confirmed dengue with symptom onset in week 5 of 2025

	2025*			
	EW 5	YTD		
Total Suspected, Probable & Confirmed Dengue Cases	6	46		
Lab Confirmed Dengue cases	0	0		
CONFIRMED Dengue Related Deaths	0	0		

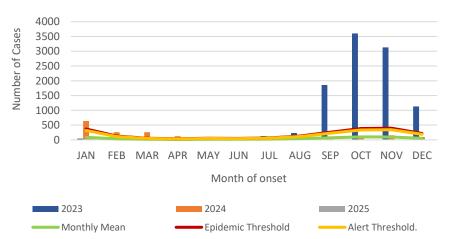
#### Points to note:

- Dengue deaths are reported based on date of death.
- \*Figure as at February 11, 2025
- Only PCR positive dengue cases are reported as confirmed.
- IgM positive cases are classified as presumed dengue.

Symptoms of Dengue fever



# Suspected, probable and confirmed dengue cases for 2023-2025 versus monthly mean, alert and epidemic threshold (2007-2022)



8 NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued





# **RESEARCH PAPER**

## Abstract

#### NHRC-23-002

# Chronic Kidney Disease in Jamaica: Updated National Prevalence Estimates and Associated Factors using the CKD-EPI 2021 Formula

Fisher L-A<sup>1, 2</sup>, Ferguson TS<sup>2</sup>, Rocke K<sup>3</sup>, Younger-Coleman N<sup>2</sup>, Guthrie-Dixon N<sup>2</sup>, Tulloch-Reid MK<sup>2</sup>, McFarlane SR<sup>4</sup>, Bennett NR<sup>2</sup>, Cunningham-Myrie C<sup>5</sup>, Aiken W<sup>6</sup>, Wiggan J<sup>7</sup>, Grant A<sup>7</sup>, Davidson T<sup>7</sup>, Webster-Kerr K<sup>7</sup>, Wilks RJ<sup>2</sup>, and the Jamaica Health and Lifestyle Survey III Investigators\*

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**Objectives:** Little is known of the prevalence of Chronic Kidney Disease (CKD) in Jamaica. We aimed to estimate the prevalence of CKD and explore associations with known risk factors in a nationally representative population based survey.

**Methods:** A cross-sectional analysis of 1189 Jamaican residents aged  $\geq$ 15 years from the Jamaica Health and Lifestyle Survey 2016-2017, was performed. CKD was defined as an estimated glomerular filtration rate (eGFR) <60mL/min/1.73m<sup>2</sup>, using the race-free CKD-EPI-2021 and Schwartz-Lyon equations. Associated factors included age, sex, socio-economic status, education level, smoking habits, body mass index (BMI), hypertension, diabetes mellitus, and self-reported sickle cell trait. Weighted prevalence estimates were determined and logistic regression models were used to evaluate associations.

**Results:** Of 1189 participants, 446 males and 743 females (mean[ $\pm$ SD] age was 49.1 $\pm$ 18.3 years). Based on weighted estimates, the prevalence of CKD was 7.6% [95%CI 6.1%-9.6%]. The majority was CKD Stage 3a (6.0%), Stage 3b 1.0%, Stage 4 0.2%, and Stage 5 0.4%. Compared to persons with normal eGFR, CKD participants were older (mean age 65.6 versus 46.8 years, p<0.001), with no significant male: female difference (7.3% vs 8.0%, p=0.667), and had higher mean systolic blood pressure (142.0 versus 130.7 mmHg, p<0.001). In a multivariable logistic regression model adjusting for a priori risk factors, age (OR[95CI] 1.07, [1.05-1.10]), sickle cell trait (OR[95CI] 4.87 [1.08-21.94]) and diabetes mellitus (OR[95CI]1.85,[1.00-3.42] but not hypertension (OR[95CI]:1.0, 0.54-1.90) were associated with CKD.

**Conclusion:** Based on reduced eGFR, national CKD prevalence is approximately 8%. This may translate to increased health care burden on the Jamaican public system.



The Ministry of Health and Wellness 15 Knutsford Boulevard, Kingston 5, Jamaica Tele: (876) 633-7924 Email: surveillance@moh.gov.jm

NOTIFICATIONS-All clinical sites



INVESTIGATION REPORTS- Detailed Follow up for all Class One Events



HOSPITAL ACTIVE SURVEILLANCE-30 sites. Actively pursued



SENTINEL REPORT- 78 sites. Automatic reporting



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