



HEALTH SURVEILLANCE BULLETIN

Week 44, 2024

Acute Flaccid Paralysis

0

Fever & Rash

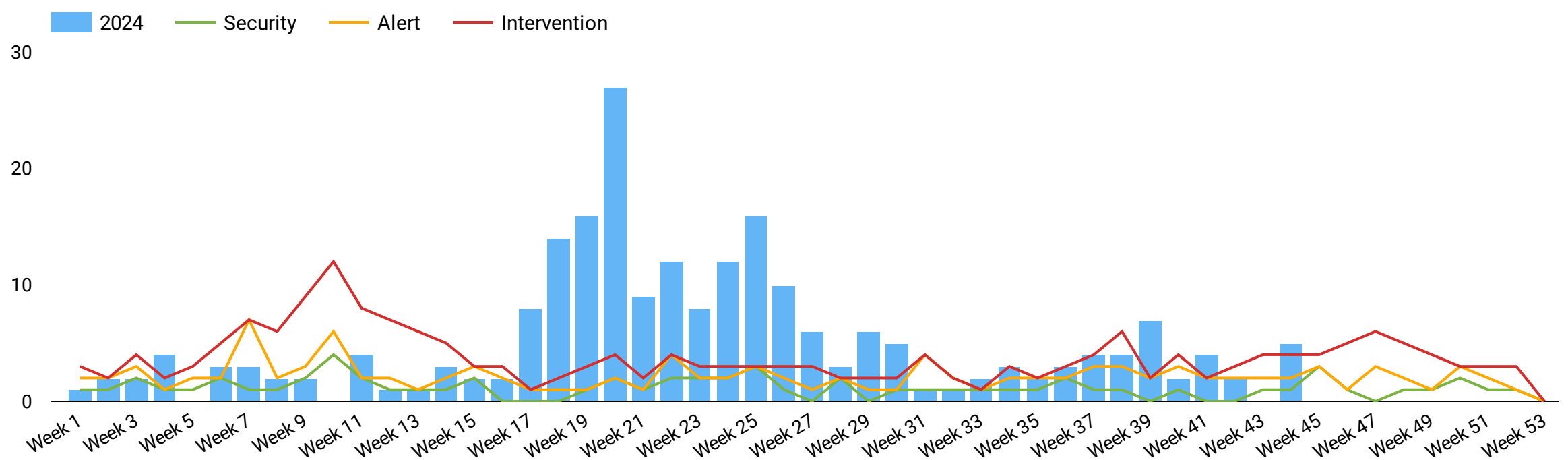
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Fever & Neurological Symptoms

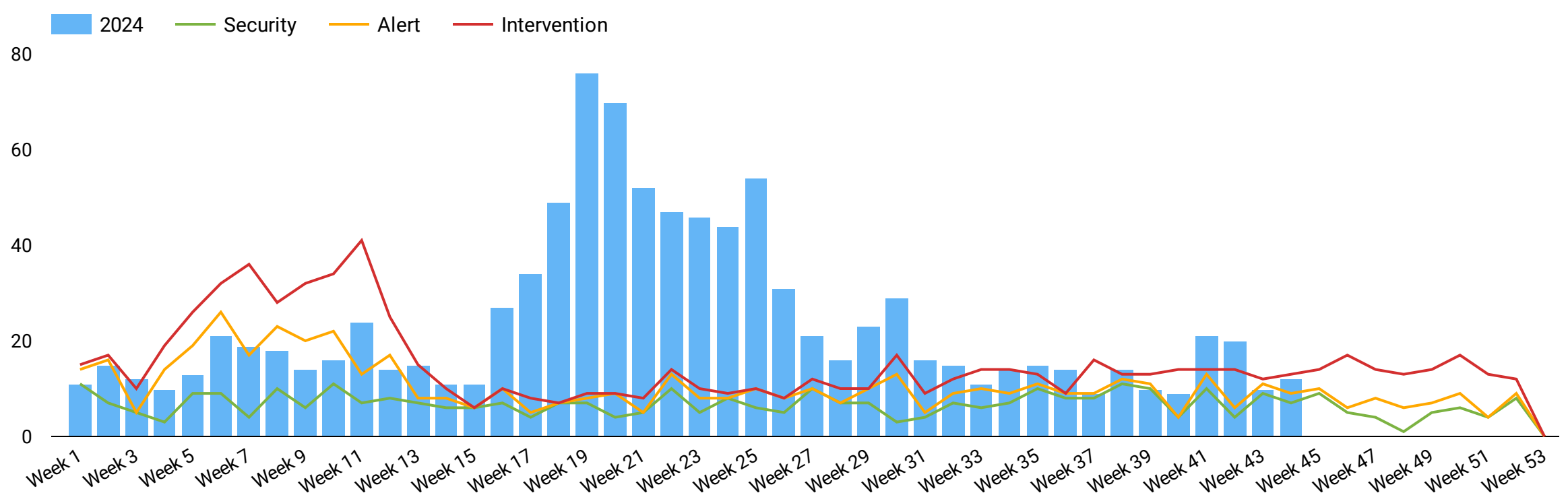
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Syndromic surveillance in primary care and hospitals indicates that fever and respiratory activity continues to increase, similar to the levels observed during previous years at this time of year. Covid 19 activity continues to decrease and seasonal Influenza activity remains low. We continue to emphasize on the importance of good hygiene practices.

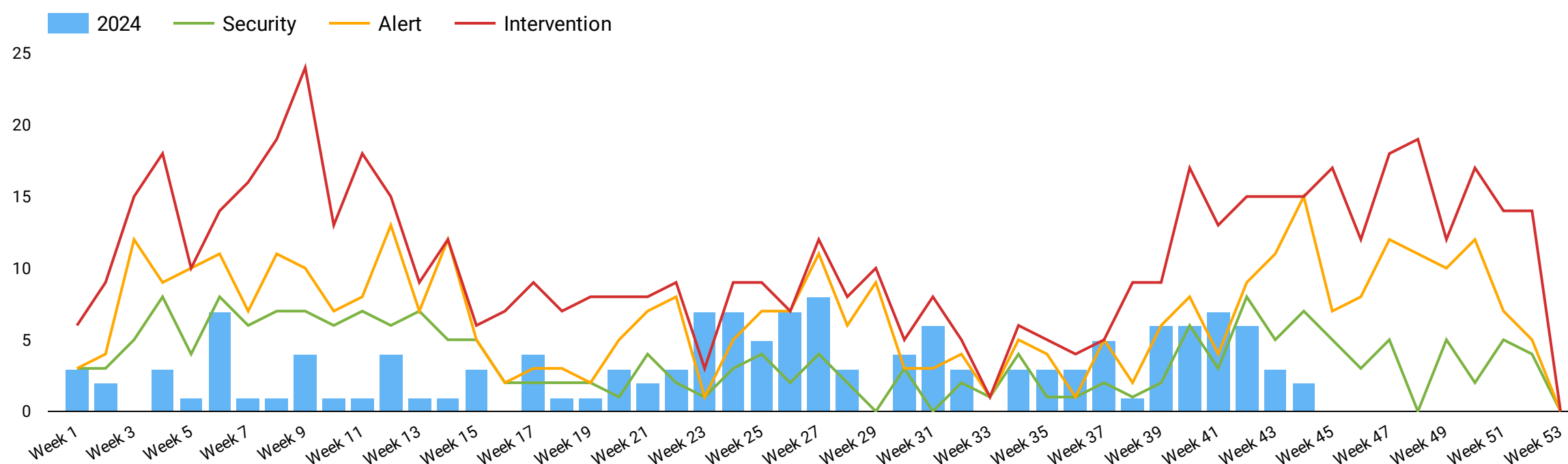
Gastroenteritis in <5 years old by Epidemiological Week



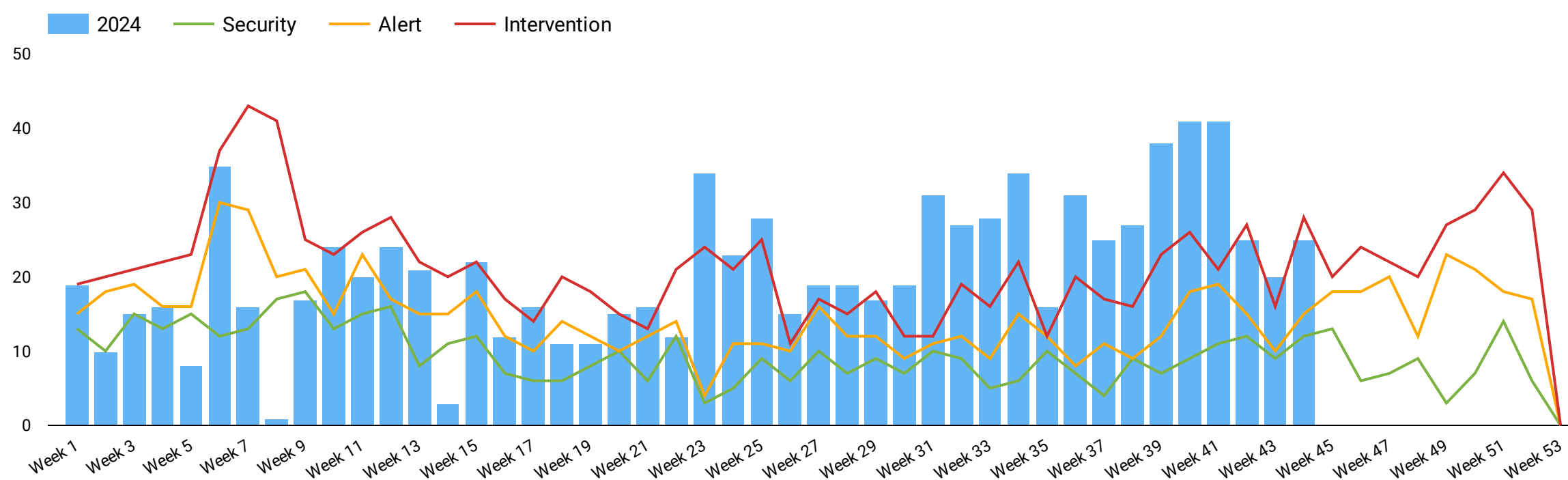
Gastroenteritis in 5 years and older by Epidemiological Week



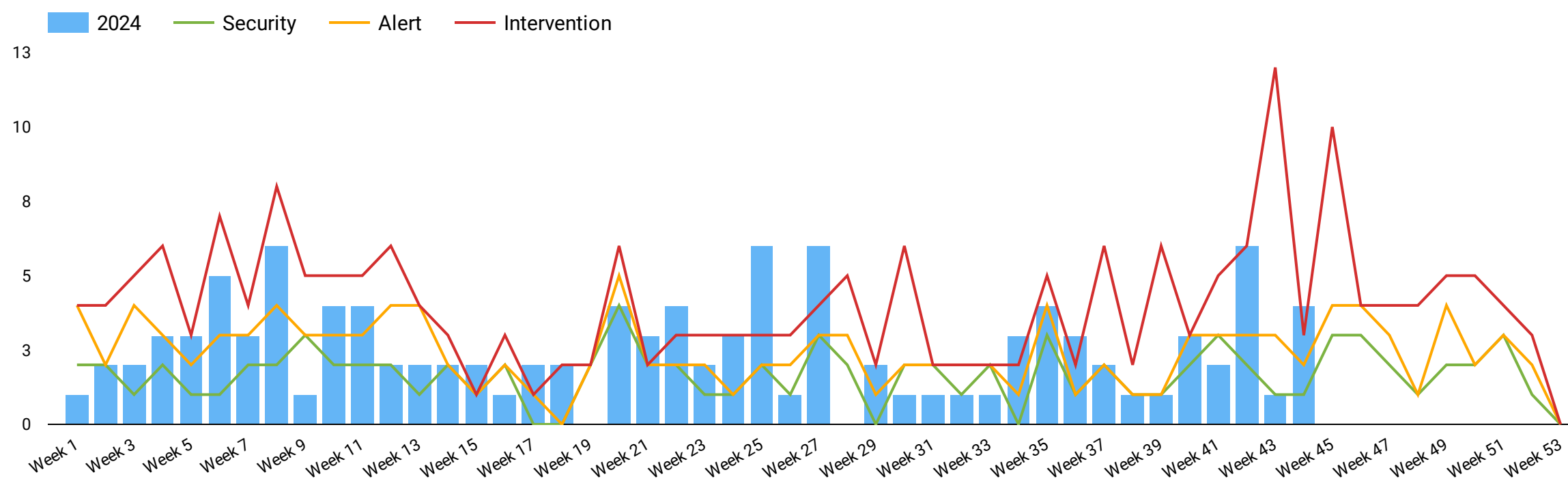
Fever & Respiratory symptoms in <5 years old by Epidemiological Week



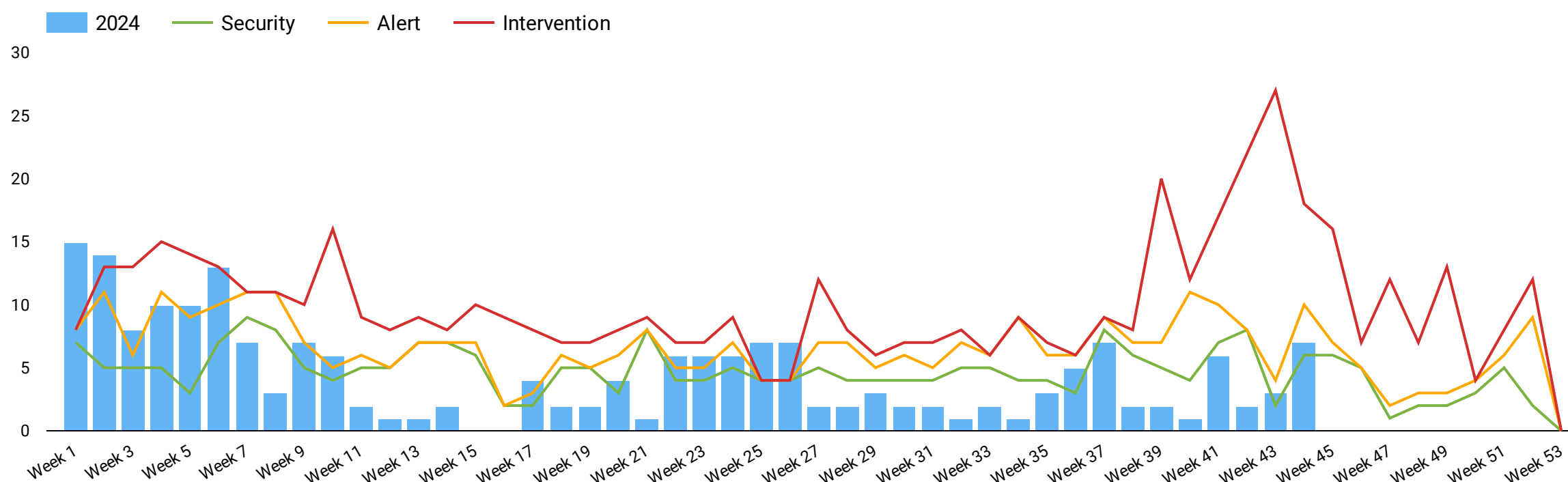
Fever & Respiratory symptoms in 5 years and older by Epidemiological Week



Undifferentiated Fever <5 years old by Epidemiological Week



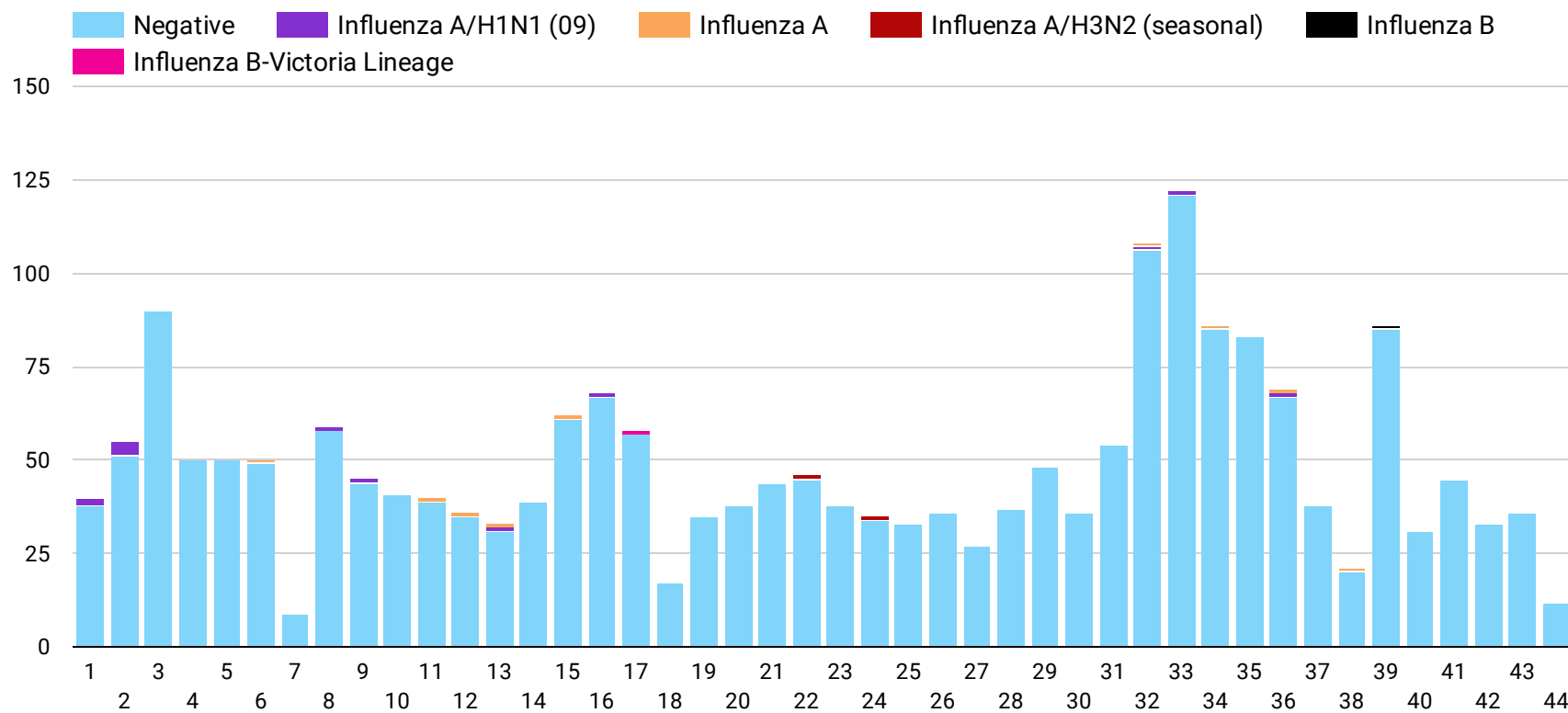
Undifferentiated Fever in 5 years and older by Epidemiological Week



Distribution of syndromes under surveillance by relative periods

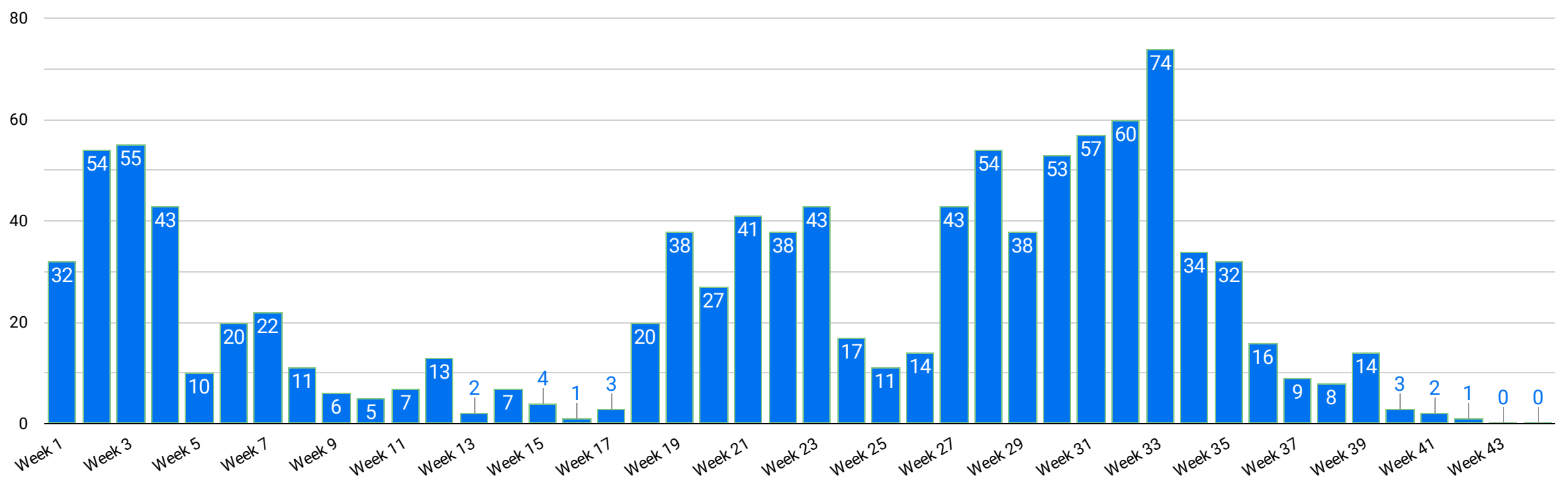
Syndrome ^	Current Week (CW)	Last Week	2024 till CW	2023 till CW	2022 till CW
Acute Flaccid Paralysis	0	0	2	1	0
Chicken Pox	0	0	9	7	1
Conjunctivitis	14	22	431	439	138
Fever and Haemorrhagic symptoms	0	0	2	5	0
Fever and Jaundice	0	0	2	1	1
Fever and Myalgia	0	1	36	10	5
Fever and Neurological symptoms	0	0	5	7	6
Fever and Rash	0	0	22	77	5
Fever and Respiratory	27	23	1,070	477	503
Gastroenteritis	17	10	1,257	967	280
Influenza like Illness	3	5	113	0	0
Injuries	67	79	2,831	3,499	3,029
Undifferentiated Fever	11	4	309	696	331

Respiratory Viruses by Epidemiological Week, 2024

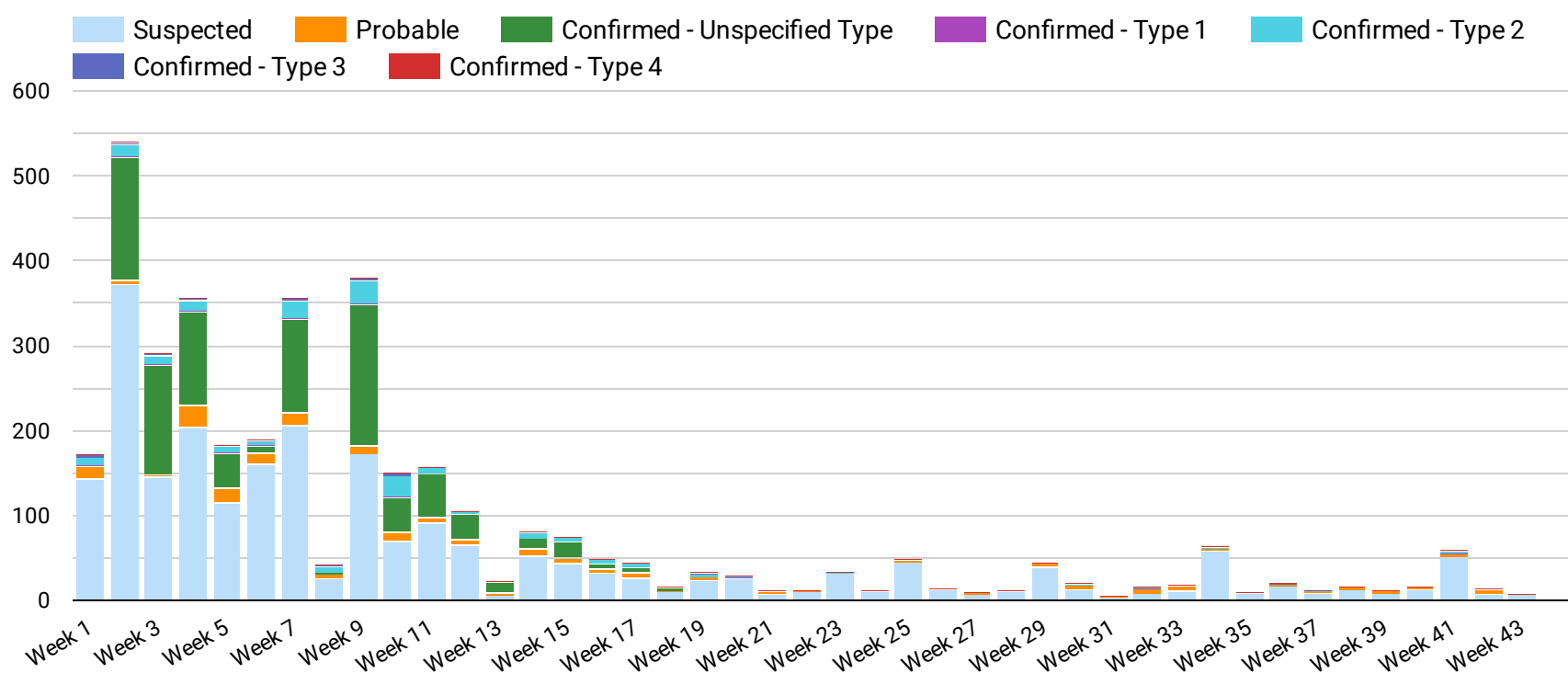


FINAL RESULT	Number
Negative	2,093
Influenza A/H1...	13
Influenza A	9
Influenza A/H3...	2
Influenza B	1
Influenza B-Vict...	1

COVID-19 by Epidemiological Week, 2024



Dengue by Epidemiological Week, 2024



Variable	Cases
Dengue Confirmed - 1	0
Dengue Confirmed - 2	194
Dengue Confirmed - 3	21
Dengue Confirmed - 4	0
Dengue Confirmed - Un...	901
Dengue Probable	216
Dengue Suspected	2,395

Grand total 3,727

Marburg Virus Disease (MVD)

Background

Marburg is a rare, severe viral hemorrhagic fever which affects both people and other primates, like apes and monkeys. Caused by infection with orthomarburgviruses (filoviridae family), Marburg virus (MARV) or Ravn virus (RAVV), the disease can lead to serious illness or death. The case fatality ratio may rise as high as 88% but this can be lowered with good and early patient care. MVD was initially detected in 1967 after two simultaneous outbreaks in Marburg and Frankfurt in Germany, and in Belgrade, Serbia. These outbreaks were associated with laboratory work using African green monkeys (*Cercopithecus aethiops*) imported from Uganda. Subsequently, outbreaks and sporadic cases have been reported in a number of Sub-Saharan countries

On 27 September 2024, the Rwanda Ministry of Health confirmed the country's first outbreak of Marburg virus disease, 66 cases and 15 deaths so far.

Transmission

Orthomarburgviruses are naturally found in the Egyptian rousette bat (*Rousettus aegyptiacus*) and can spread from bats to people. Marburg virus is most commonly found in sub-Saharan Africa. The virus is found in the saliva, urine, and faeces of infected bats. Once the disease has "spilled over" from wildlife to people, those who are sick can spread the disease to other people. Transmission is via direct contact with infectious material, such as through broken skin or mucous membranes in the eyes, nose, or mouth.

Those most at risk for Marburg include:

- People in contact with Egyptian rousette bats or their excretions
- People caring for infected persons, or handling materials contaminated with their bodily fluids.
- Persons handling the bodies of persons who died from the disease
- Persons exposed to the semen of a recently recovered man
- People in contact with infected non-human primates

Symptoms

The incubation period is from 2 to 21 days.

Symptoms of MVD include:

- Abrupt onset of high fever, severe headache and severe malaise.
- Muscle aches and pains.
- Chest pain and sore throat (less commonly)
- Severe watery diarrhoea, abdominal pain, nausea and vomiting.
- Non-itchy maculo-papular rash between 2 and 7 days post symptom onset
- From day 5: haemorrhagic manifestations, (vomitus or faeces, or from the nose, gums, vagina and venepuncture sites)
- Confusion, irritability and aggression with central nervous system involvement
- Orchitis (uni or bilateral) in the late phase of disease. [uncommon]
- Death may result 8 or 9 days post onset, usually preceded by severe blood loss, liver failure, multi-organ dysfunction and shock.

Diagnosis

The diagnosis of Marburg Virus Disease can be made using the following tests on serum samples:

- Polymerase chain reaction (PCR)
- IgM-capture ELISA
- Antigen-capture ELISA testing
- Virus isolation in high-containment laboratories

Treatment

Suspected or confirmed cases are isolated in a designated treatment centre.

At present, treatment is limited to supportive care, but a range of vaccines and drug therapies are under development.

Marburg virus can persist post-infection in immune-privileged sites including the testicles and the inside of the eye (possibly also in the placenta, amniotic fluid and foetus of women infected while pregnant and in breast milk of women infected while breastfeeding).

Relapse-symptomatic illness in the absence of re-infection in a recovered case is a rare occurrence. Reasons for this phenomenon are not yet fully understood.

Containment measures include:

- Ongoing community education regarding the disease, maintaining good hygiene and a clean environment.
- Following strict infection prevention and control procedures when managing cases
- Aggressive contact tracing; quarantining and monitoring of at risk persons for 21 days post exposure

Prevention

To prevent MVD persons are advised to avoid:

- Contact with blood and body fluids of people who are sick or items that may have come into contact with these fluids (sheets, clothing etc)
- Contact with semen from a person who recovered from Marburg, until they are cleared by testing or the appropriate period of time.
- Contact with Egyptian rousette bats (mines and caves) and non-human primates (including blood and meat) if in areas where Marburg is present.

References

1. <https://www.cdc.gov/marburg/about/index.html>
2. <https://www.who.int/news-room/fact-sheets/detail/marburg-virus-disease>
3. https://www.lemonde.fr/en/environment/article/2024/10/22/marburg-virus-how-rwanda-managed-to-contain-the-epidemic_6730068_114.html