



CHIKUNGUNYA OUTBREAK LA RÉUNION, 2024-2025

Muriel Vincent, Fabian Thouillot
Cellule de Santé publique France en région

Virtual consultation on "**Generating high-quality evidence on existing vaccines for Chikungunya in response to outbreaks**", Fiocruz and WHO, 8 April 2025

AEDES ALBOPICTUS TRANSMITTED ARBOVIRUSES IN RÉUNION ISLAND



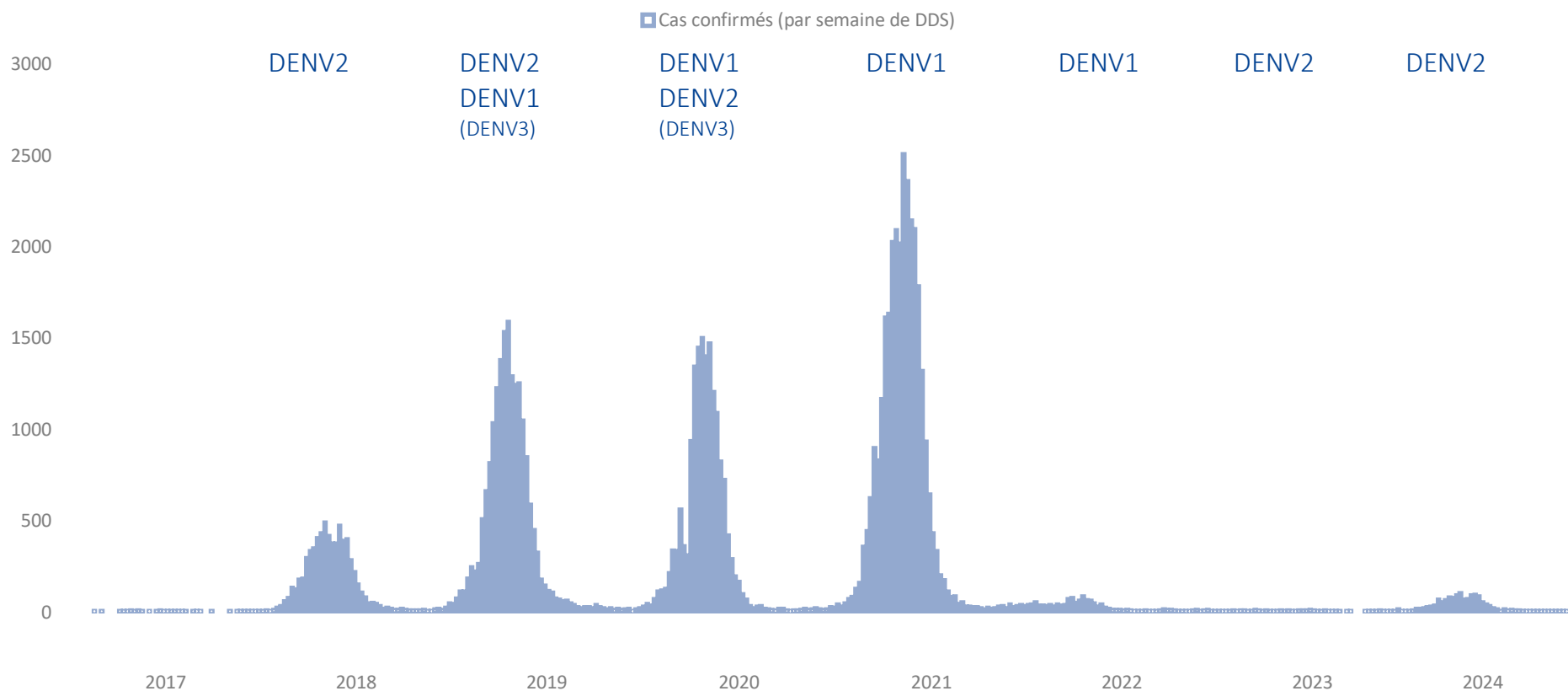
Chikungunya

- Major outbreak in 2005-2006: **250 000 estimated cases**
- Since 2010 up to 2024: no local transmission of CHIKV
- Very few imported cases

Dengue

- Massive outbreak in the 70ties
- Untill 2017: sporadic cases and small outbreaks
- 2017 – 2021 several successive epidemic waves and year round transmission
- 2022-2023 : limited transmission
- 2024 : small localized outbreak
- 2025 : sporadic cases

DENGUE, RÉUNION, 2017-2024



CHIKUNGUNYA, RÉUNION, 2024...

Re-emergence of Chikungunya!

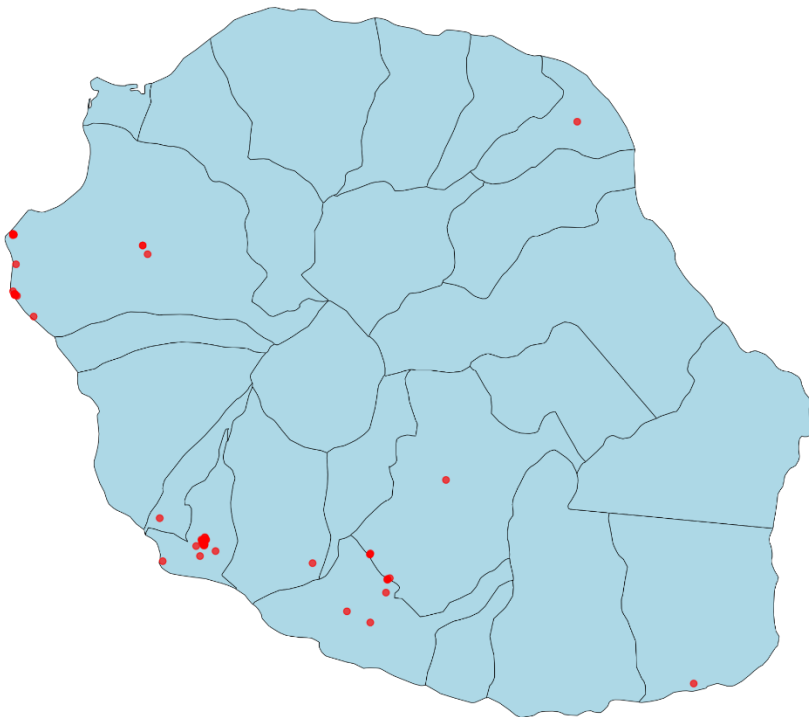
- 22/8/2024 (southern hemisphere winter): PCR + confirmed case in Saint Paul (west)
- No travel history, no imported cases, no suspected cases in the vicinity=> **locally acquired case**
- Following days and weeks: 4 confirmed cases detected near by => **1st cluster (les Aigrettes)** with in total 7 cases with an epi-link
- **Le 19/9**, case in l'Ermitage, no link with Aigrettes. A fewdays later a 2nd case => **2nd cluster**
- Then, 3 weeks without new cases
- New cases from week 43 (en of October 2024) and spread to other communities

INVESTIGATION AND RESPONSE AROUND REPORTED CASES

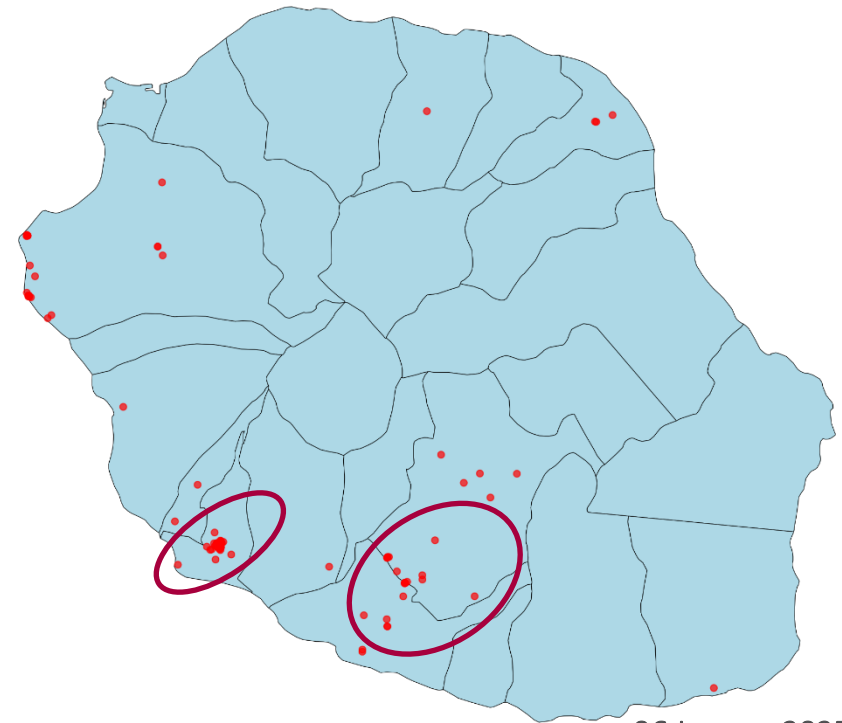


- Individual epidemiological investigation until mid-January
- Door to door case finding
- Systematic sampling and lab examination in case of compatible symptoms
- Destruction of breeding sites
- Insecticide spraying
- Information and sensitization of the population
- Communication campaigns

CHIKUNGUNYA, RÉUNION, 2024-2025



22 December 2024

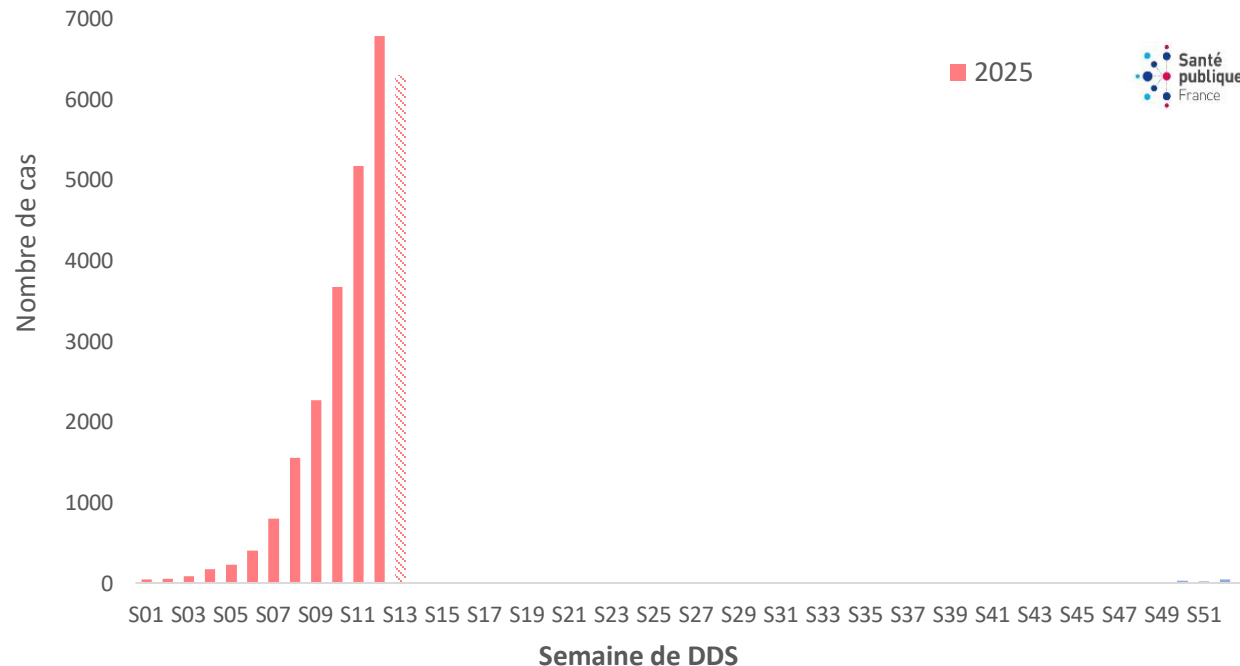


06 January 2025

Data ARS, map SpF

CHIKUNGUNYA EPICURVE, RÉUNION, 2025

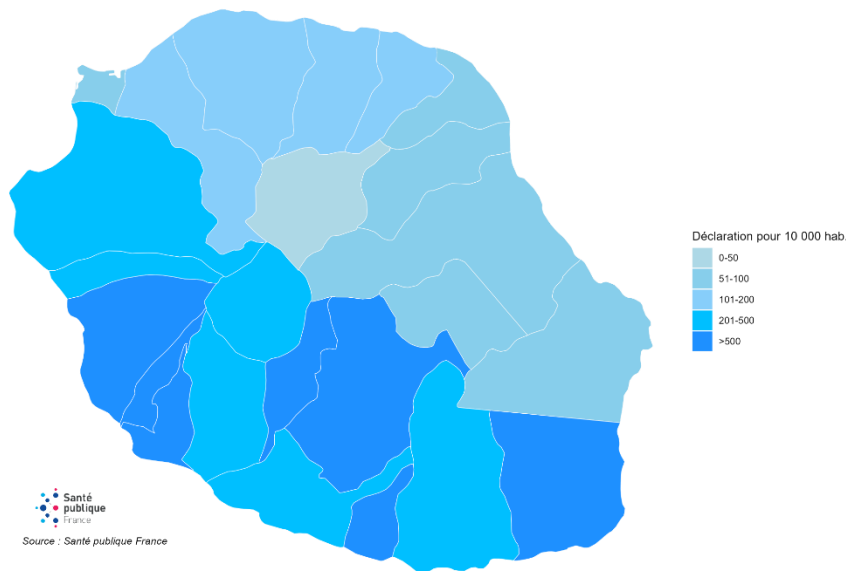
Locally acquired cases by week of onset of symptoms, week 24/2024-week 13/2025)



Total 30 March 2025:

- 27,669 confirmed cases since August 2024
- 6 289 cases in week 13 (data consolidation still ongoing)

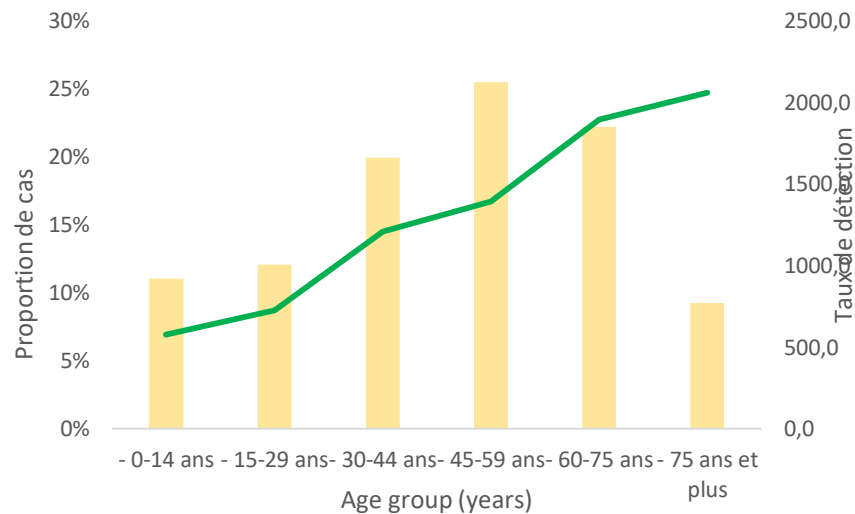
Notification rate/10 000 inhabitants, by municipality, (week of symptom onset W33-W13/2025)



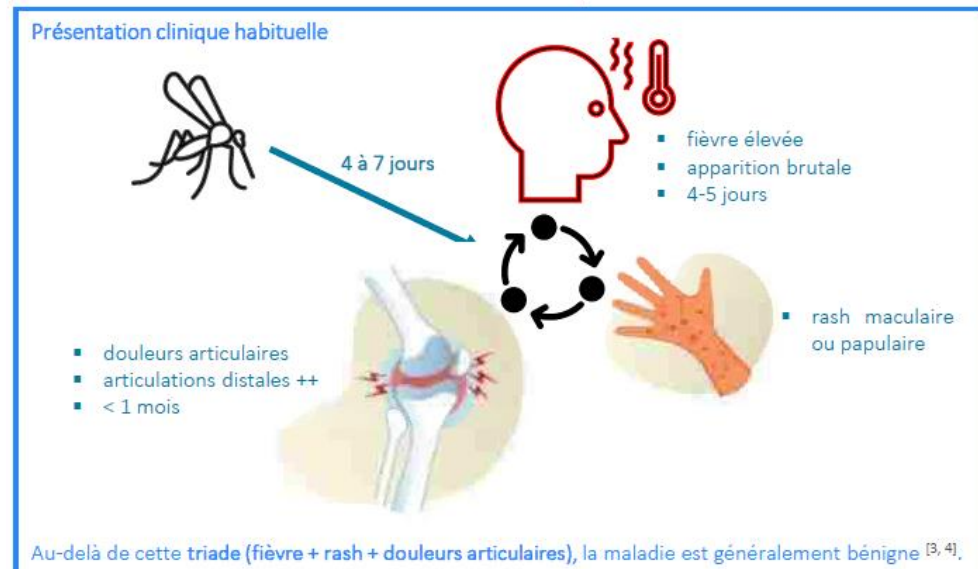
- Hotspot in the south (Tampon municipality (> 30% of total number of cases)
- Progressive extension to the west and north
- East less affected
- All 24 municipalities have at least one case
- Most affected municipalities :
 - Number of cases : Le Tampon (2600 cases; St Paul 900 cases and St Pierre 800 cases)
 - Notification rate/10,000 : Le Tampon (1 600) >>> St Paul, St Pierre, St Leu et Etang Salé (400-500)

CHIKUNGUNYA, RÉUNION, 2024-2025

Age and sex distribution



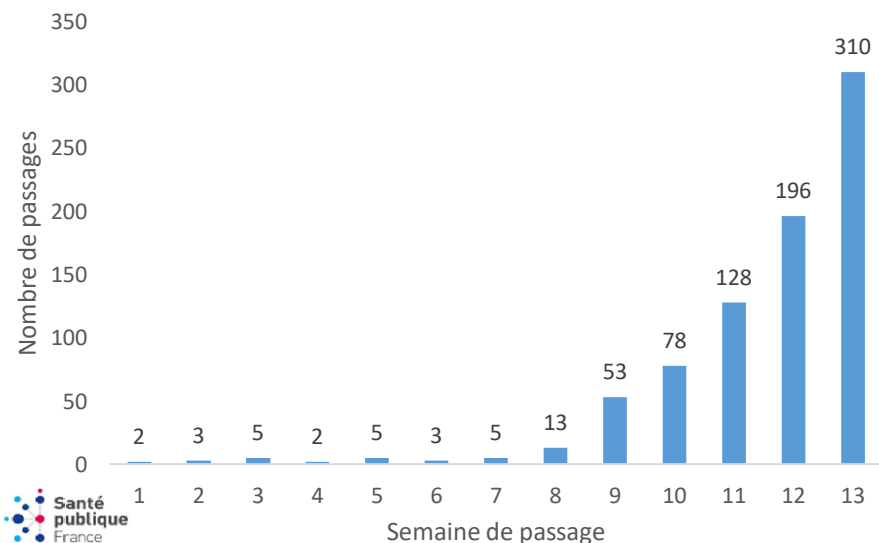
- Median age : 50 years [3 months – 102 years]
- Sex ratio M/F : 0,83
- Most cases in age group 45-59 years
- Notification rate highest in age-groups : 60-75 years and > 75 years (2% affected!)
- Children < 14 ans less frequently affected



Extrait de Le Point Sur le Chikungunya, SpF Réunion – Octobre 2024

EMERGENCY ROOM CONSULTATIONS AND HOSPITALISATIONS, RÉUNION, 2025

Number of emergency room consultations for suspected arbovirus infection, Réunion, week 1-week12, 2025

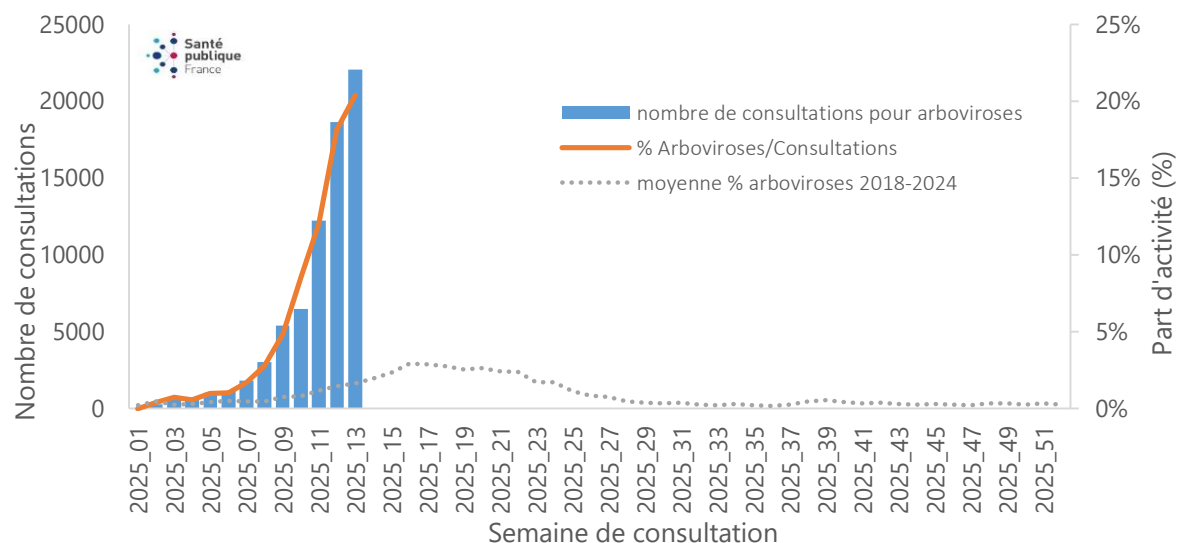


Cases hospitalized > 24h

- 167 cases,
- 25 % less than 6 years of age
- 47 % older than 65
- 78 % had at least one comorbidity, at risk for severe forms of the disease
- 31 severe cases:
 - 20 adult > 65 years
 - 16 newborns < 2 months
- 2 deaths attributed to chikungunya (patients > 75 years)
- Role of CHIKV infection in additional deaths: analysis ongoing

ARBOVIRUS CONSULTATION GENERAL PRACTITIONERS, RÉUNION, 2025

Proportion of GP consultations for suspected arbovirus infection, by week of consultation, Réunion, 2025



Week 13: 20 % of all GP consultations.

22 000 estimated total number of patients with symptoms suggestive of Chikungunya

More than 70 000 estimated total number of patients with symptoms suggestive of Chikungunya in 2025

CONTROL MEASURES

VECTORCONTROL

Individual: repellents, mosquito nets

Pregnant women and new- borns

NAT SCREEING OF BLOOD DONATIONS

VACCINATION OF INDIVIDUALS AT RISK OF SEVERE DISEASE:

- 65 YEARS AND COMORBIDITIES
- < 65 YEARS AND COMORBIDITIES
- VECTOR CONTROL STAFF

ADAPTATION OF A SIR MODEL DEVELOPPED FOR THE 2018-2019 DENGUE OUTBREAKS (ANDRONICO ET AL, JID 2024)

- EPIDEMIC PEAK EXPECTED AROUND MID APRIL
- ESTIMATED PROPORTION OF THE POPULATION INFECTED DURING THIS OUTBREAK: 12 – 35 %

TOOLS AND SENSITIZATION

Tools for health professionals :

- « Le Point sur le Chikungunya » : document with essential information on the disease (October 2024 <https://www.lareunion.ars.sante.fr/le-point-sur-le-chikungunya-octobre-2024>)
- Tool for the differential diagnosis « chik/dengue/leptospirosis » : how to distinguish, when to test for which pathogen(<https://www.lareunion.ars.sante.fr/media/134060/download?inline>)

ÉPIDÉMIE DE CHIKUNGUNYA À LA RÉUNION

ÉPIDÉMIE DE MOYENNE INTENSITÉ NIVEAU 4 DU PLAN ORSEC

Retrouvez dans cette rubrique toutes les informations utiles :

- symptômes et modes de transmission
- recommandations pour se protéger
- informations aux professionnels de santé
- supports de communication ...

[En savoir plus](#)

ÉPIDÉMIE DE CHIKUNGUNYA
C'EST MAINTENANT QU'IL FAUT AGIR !

COMMENT SE PROTÉGER ?

- Se protéger contre les piqûres de moustiques.
- Éliminer les gîtes larvaires.

LES SYMPTÔMES

Fièvre associée ou non à des maux de tête, douleurs articulaires et/ou musculaires, éruptions cutanées rouges, fatigue.

QU'FAIRE EN CAS DE SYMPTÔMES ?

- Consulter immédiatement son médecin traitant.
- Continuer à se protéger contre les piqûres de moustiques pour éviter de contaminer son entourage.

ROUY BAKO !

Accueillir au signal de la Rouy Bakou, respecter les mesures d'hygiène et de sécurité.

ÉPIDÉMIE DE CHIKUNGUNYA
C'EST MAINTENANT QU'IL FAUT AGIR !

COMMENT SE PROTÉGER ?

En évitant les piqûres de moustiques

En éliminant les gîtes larvaires

ANALYSIS & PERSPECTIVES

- Generalized outbreak
- Eastral summer : good conditions for the vector (hot, lots of rains, etc... + POST-GARANCE)
- Questions?
 - Size of the outbreak?
 - One wave? Several? -// dengue)
 - « Exportation »? Mayotte? Other countries in Indian Ocean? Mainland France?
 - Severity?
 - Is chikungunya the new dengue of Reunion Island?

RESPONSE!



MERCI DE VOTRE ATTENTION MERCI À TOUS LES PARTENAIRES IMPLIQUÉS DANS CETTE SURVEILLANCE

Les médecins sentinelles, les médecins hospitaliers, les personnels des laboratoires,

