

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Page 1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Page 4
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Page 5
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Page 6
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Pages 6-7
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Page 7
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Supp File 1
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Page 7
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Page 7
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Page 9
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Page 8
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Page 9
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Pages 9-10
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Page 8
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Page 10
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Page 10
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Page 10
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Page 10
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Page 10
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Page 9
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Page 10
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Page 10, Figure 1

Section and Topic	Item #	Checklist item	Location where item is reported
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Figure 1
Study characteristics	17	Cite each included study and present its characteristics.	Page 10, Table 1
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Suppl File 3
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Pages 10-14, Figures 2,3,4
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Page 11
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Pages 10-14, Figures 2,3,4
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Pages 10-11
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Pages 10-11
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	NA
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Suppl File 3
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Pages 14-16
	23b	Discuss any limitations of the evidence included in the review.	Page 16
	23c	Discuss any limitations of the review processes used.	Page 16
	23d	Discuss implications of the results for practice, policy, and future research.	Pages 16-17
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Page 6
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Page 6
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	NA
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Page 19
Competing interests	26	Declare any competing interests of review authors.	Page 19
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Raw data will be available in Zenodo upon manuscript acceptance for publication

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

Supplementary File 2: Search strategy

MEDLINE (Pubmed) (2007 to 13 july 2023)

(((((("Dengue Virus"[Mesh]) OR ("Dengue/diagnosis"[Mesh] OR "Dengue/epidemiology"[Mesh])) OR (dengue[Title/Abstract] OR "Dengue Virus*"[Title/Abstract] OR "Breakbone Fever"[Title/Abstract] OR "Break-Bone Fever"[Title/Abstract] OR "Break Bone Fever"[Title/Abstract] OR "Breakbone Fever Virus*"[Title/Abstract] OR "Classical Dengue Fever*"[Title/Abstract] OR "Dengue Fever"[Title/Abstract] OR "Classical Dengue*"[Title/Abstract])) OR (((("Zika Virus"[Mesh]) OR ("Zika Virus Infection/diagnosis"[Mesh] OR "Zika Virus Infection/epidemiology"[Mesh])) OR (ZikV[Title/Abstract] OR zika[Title/Abstract] OR "Zika Virus*"[Title/Abstract] OR "Zika Virus Infection"[Title/Abstract] OR "ZikV Infection"[Title/Abstract] OR "Zika Fever"[Title/Abstract] OR "Congenital Zika Syndrome"[Title/Abstract] OR "Congenital Zika Virus Infection"[Title/Abstract]))) OR (((("Chikungunya virus"[Mesh]) OR ("Chikungunya Fever/diagnosis"[Mesh] OR "Chikungunya Fever/epidemiology"[Mesh])) OR (Chikungunya[Title/Abstract] OR "Chikungunya Fever*"[Title/Abstract] OR "Chikungunya Virus Infection*"[Title/Abstract] OR "Chikungunya Virus*"[Title/Abstract] OR "Chickungunya Fever*"[Title/Abstract]))) AND (((("Austria"[Title/Abstract] OR "Belgium"[Title/Abstract] OR "Bulgaria"[Title/Abstract] OR "Croatia"[Title/Abstract] OR "Cyprus"[Title/Abstract] OR "Czech Republic"[Title/Abstract] OR "Denmark"[Title/Abstract] OR "Estonia"[Title/Abstract] OR "Finland"[Title/Abstract] OR "France"[Title/Abstract] OR "Germany"[Title/Abstract] OR "Greece"[Title/Abstract] OR "Hungary"[Title/Abstract] OR "Iceland"[Title/Abstract] OR "Ireland"[Title/Abstract] OR "Italy"[Title/Abstract] OR "Latvia"[Title/Abstract] OR "Liechtenstein"[Title/Abstract] OR "Lithuania"[Title/Abstract] OR "Luxembourg"[Title/Abstract] OR "Malta"[Title/Abstract] OR "Netherlands"[Title/Abstract] OR "Norway"[Title/Abstract] OR "Poland"[Title/Abstract] OR "Portugal"[Title/Abstract] OR "Romania"[Title/Abstract] OR "Slovakia"[Title/Abstract] OR "Slovenia"[Title/Abstract] OR "Spain"[Title/Abstract] OR "Sweden"[Title/Abstract] OR "United Kingdom"[Title/Abstract]))) OR (("Europe"[Mesh]) OR (Europe[Title/Abstract]))) Filters: from 2007/1/1 - 2023/7/13

Embase (2007 to 13 july 2023)

#1 'dengue virus'/exp/mj OR 'zika virus'/exp/mj OR 'chikungunya virus'/exp/mj

#2 dengue OR 'dengue virus*' OR 'breakbone fever' OR 'break-bone fever' OR 'break bone fever' OR 'breakbone fever virus*' OR 'classical dengue fever*' OR 'dengue fever' OR 'classical dengue*' OR zikv OR zika OR 'zika virus' OR 'zika virus infection' OR 'zikv infection' OR 'zika fever' OR 'congenital zika syndrome' OR 'congenital zika virus infection' OR chikungunya OR 'chikungunya fever*' OR 'chikungunya virus infection*' OR 'chickungunya fever*':ti,ab

#3 #1 OR #2

#4 'europe'/exp OR europe:ti,ab OR ('bulgaria' OR 'croatia' OR 'cyprus' OR 'czech republic' OR 'denmark' OR 'estonia' OR 'finland' OR 'france' OR 'germany' OR 'greece' OR 'hungary' OR 'iceland' OR 'ireland' OR 'italy' OR 'latvia' OR 'liechtenstein' OR 'lithuania' OR 'luxembourg' OR 'malta' OR 'netherlands' OR 'norway' OR 'poland' OR 'portugal' OR 'romania' OR 'slovakia' OR 'slovenia' OR 'spain' OR 'sweden' OR 'united kingdom' OR 'switzerland' OR europe:ti,ab)

#5 3 AND #4 AND ('diagnosis'/lnk OR 'epidemiology'/lnk) AND [2007-2023]/py

Supplementary File 3: List of papers included in the analysis

1. Alves M J, Fernandes P L, Amaro F, Osório H, Luz T, Parreira P, Andrade G, Zé-Zé L, Zeller H. Clinical presentation and laboratory findings for the first autochthonous cases of dengue fever in Madeira Island, Portugal, October 2012. *Euro Surveill.* 2013;18(6):pii=20398. <https://doi.org/10.2807/ese.18.06.20398-en>
2. Paola Angelini, Alba Carola Finarelli, Giuliano Silvi, Bianca Maria Borrini, Gabriella Frasca, Andrea Mattivi, Erika Massimiliani, Claudio Po, Raffaella Angelini, Claudio Venturelli, Pierluigi Macini. Chikungunya emergency in Emilia-Romagna: learning through experience. *Epidemiol Prev.* 2008 Jul-Oct;32(4-5):258-63.
3. Angelini P, Macini P, Finarelli AC, Pol C, Venturelli C, Bellini R, Dottori M. Chikungunya epidemic outbreak in Emilia-Romagna (Italy) during summer 2007. *Parassitologia.* 2008 Jun;50(1-2):97-8. PMID: 18693568.
4. Angelini R, Finarelli AC, Angelini P, Po C, Petropulacos K, Macini P, Fiorentini C, Fortuna C, Venturi G, Romi R, Majori G, Nicoletti L, Rezza G, Cassone A. An outbreak of chikungunya fever in the province of Ravenna, Italy. *Euro Surveill.* 2007 Sep 6;12(9):E070906.1. doi: 10.2807/esw.12.36.03260-en. PMID: 17900424.
5. Angelini R, Finarelli A C, Angelini P, Po C, Petropulacos K, Silvi G, Macini P, Fortuna C, Venturi G, Magurano F, Fiorentini C, Marchi A, Benedetti E, Bucci P, Boros S, Romi R, Majori G, Ciufolini M G, Nicoletti L, Rezza G, Cassone A. Chikungunya in north-eastern Italy: a summing up of the outbreak. *Euro Surveill.* 2007;12(47):pii=3313. <https://doi.org/10.2807/esw.12.47.03313-en>
6. Barzon L, Gobbi F, Capelli G, Montarsi F, Martini S, Riccetti S, Sinigaglia A, Pacenti M, Pavan G, Rassu M, Padovan MT, Manfrin V, Zanella F, Russo F, Foglia F, Lazzarini L. Autochthonous dengue outbreak in Italy 2020: clinical, virological and entomological findings. *J Travel Med.* 2021 Dec 29;28(8):taab130. doi: 10.1093/jtm/taab130. PMID: 34409443; PMCID: PMC8499737.
7. Calba C, Guerbois-Galla M, Franke F, Jeannin C, Auzet-Caillaud M, Grard G, Pigaglio L, Decoppet A, Weicherding J, Savail MC, Munoz-Riviero M, Chaud P, Cadiou B, Ramalli L, Fournier P, Noël H, De Lamballerie X, Paty MC, Leparac-Goffart I. Preliminary report of an autochthonous chikungunya outbreak in France, July to September 2017. *Euro Surveill.* 2017 Sep;22(39):17-00647. doi: 10.2807/1560-7917.ES.2017.22.39.17-00647. PMID: 29019313; PMCID: PMC5709952.
8. Beniamino Caputo, Gianluca Russo, Mattia Manica, Francesco Vairo, Piero Poletti, Giorgio Guzzetta, Stefano Merler, Carolina Scagnolari, Angelo Solimini. A comparative analysis of the 2007 and 2017 Italian chikungunya outbreaks and implication for public health response. *PLOS NTD*, June 11, 2020 <https://doi.org/10.1371/journal.pntd.0008159>
9. Cochet A, Calba C, Jourdain F, Grard G, Durand GA, Guinard A; Investigation team; Noël H, Paty MC, Franke F. Autochthonous dengue in mainland France, 2022: geographical extension and incidence increase. *Euro Surveill.* 2022 Nov;27(44):2200818. doi: 10.2807/1560-7917.ES.2022.27.44.2200818. PMID: 36330819; PMCID: PMC9635021.
10. Delisle E, Rousseau C, Broche B, Leparac-Goffart I, L'Ambert G, Cochet A, Prat C, Foulongne V, Ferre JB, Catelinois O, Flusin O, Tchernonog E, Moussion IE, Wiegandt A, Septfons A, Mendy A, Moyano MB, Laporte L, Maurel J, Jourdain F, Reynes J, Paty MC, Golliot F. Chikungunya outbreak in Montpellier, France, September to October 2014. *Euro Surveill.* 2015 Apr 30;20(17):21108. doi: 10.2807/1560-7917.es2015.20.17.21108. PMID: 25955774.
11. Giron S, Franke F, Decoppet A, Cadiou B, Travaglini T, Thirion L, Durand G, Jeannin C, L'Ambert G, Grard G, Noël H, Fournet N, Auzet-Caillaud M, Zandotti C, Aboukaïs S, Chaud P, Guedj S, Hamouda L, Naudot X, Ovize A, Lazarus C, de Valk H, Paty MC, Leparac-Goffart I. Vector-borne transmission of Zika virus in Europe, southern France, August 2019. *Euro Surveill.* 2019 Nov;24(45):1900655. doi: 10.2807/1560-7917.ES.2019.24.45.1900655. PMID: 31718742; PMCID: PMC6852313.
12. Gjenero-Margan I, Aleraj B, Krajcar D, Lesnikar V, Klobučar A, Pem-Novosel I, Kurečić-Filipović S, Komparak S, Martić R, Duričić S, Betica-Radić L, Okmadžić J, Vilibić-Čavlek T, Babić-Erceg A, Turković B, Avsić-Županc T, Radić I, Ljubić M, Sarac K, Benić N, Mlinarić-Galinović G. Autochthonous dengue fever in Croatia, August-September 2010. *Euro Surveill.* 2011 Mar 3;16(9):19805. PMID: 21392489.

13. Gould EA, Gallian P, De Lamballerie X, Charrel RN. First cases of autochthonous dengue fever and chikungunya fever in France: from bad dream to reality! *Clin Microbiol Infect.* 2010 Dec;16(12):1702-4. doi: 10.1111/j.1469-0691.2010.03386.x. PMID: 21040155.
14. Grandadam M, Caro V, Plumet S, Thiberge JM, Souarès Y, Failloux AB, Tolou HJ, Budelot M, Cosserat D, Leparç-Goffart I, Desprès P. Chikungunya virus, southeastern France. *Emerg Infect Dis.* 2011 May;17(5):910-3. doi: 10.3201/eid1705.101873. PMID: 21529410; PMCID: PMC3321794.
15. La Ruche G, Souarès Y, Armengaud A, Peloux-Petiot F, Delaunay P, Desprès P, Lenglet A, Jourdain F, Leparç-Goffart I, Charlet F, Ollier L, Mantey K, Mollet T, Fournier JP, Torrents R, Leitmeyer K, Hilairat P, Zeller H, Van Bortel W, Dejour-Salamanca D, Grandadam M, Gastellu-Etchegorry M. First two autochthonous dengue virus infections in metropolitan France, September 2010. *Euro Surveill.* 2010 Sep 30;15(39):19676. PMID: 20929659.
16. Lazzarini L, Barzon L, Foglia F, Manfrin V, Pacenti M, Pavan G, Rassa M, Capelli G, Montarsi F, Martini S, Zanella F, Padovan MT, Russo F, Gobbi F. First autochthonous dengue outbreak in Italy, August 2020. *Euro Surveill.* 2020 Sep;25(36):2001606. doi: 10.2807/1560-7917.ES.2020.25.36.2001606. PMID: 32914745; PMCID: PMC7502902.
17. Manica M, Guzzetta G, Poletti P, Filipponi F, Solimini A, Caputo B, Della Torre A, Rosà R, Merler S. Transmission dynamics of the ongoing chikungunya outbreak in Central Italy: from coastal areas to the metropolitan city of Rome, summer 2017. *Euro Surveill.* 2017 Nov;22(44):17-00685. doi: 10.2807/1560-7917.ES.2017.22.44.17-00685. PMID: 29113629; PMCID: PMC5710132.
18. Marchand E, Prat C, Jeannin C, Lafont E, Bergmann T, Flusin O, Rizzi J, Roux N, Busso V, Deniau J, Noel H, Vaillant V, Leparç-Goffart I, Six C, Paty MC. Autochthonous case of dengue in France, October 2013. *Euro Surveill.* 2013 Dec 12;18(50):20661. doi: 10.2807/1560-7917.es2013.18.50.20661. PMID: 24342514.
19. Monge S, García-Ortúzar V, López Hernández B, Lopaz Pérez MÁ, Delacour-Estrella S, Sánchez-Seco MP, Fernández Martínez B, García San Miguel L, García-Fulgueiras A, Sierra Moros MJ; Dengue Outbreak Investigation Team. Characterization of the first autochthonous dengue outbreak in Spain (August-September 2018). *Acta Trop.* 2020 May;205:105402. doi: 10.1016/j.actatropica.2020.105402. Epub 2020 Feb 20. PMID: 32088276.
20. Paty MC. La dengue en France métropolitaine [Dengue fever in mainland France]. *Arch Pediatr.* 2014 Nov;21(11):1274-8. French. doi: 10.1016/j.arcped.2014.07.002. Epub 2014 Jul 28. PMID: 25080833.
21. Rezza G. Chikungunya is back in Italy: 2007-2017. *J Travel Med.* 2018 Jan 1;25(1). doi: 10.1093/jtm/tay004. PMID: 29669058.
22. Rezza G, Nicoletti L, Angelini R, Romi R, Finarelli AC, Panning M, Cordioli P, Fortuna C, Boros S, Magurano F, Silvi G, Angelini P, Dottori M, Ciufolini MG, Majori GC, Cassone A; CHIKV study group. Infection with chikungunya virus in Italy: an outbreak in a temperate region. *Lancet.* 2007 Dec 1;370(9602):1840-6. doi: 10.1016/S0140-6736(07)61779-6. PMID: 18061059.
23. Riccardo F, Venturi G, Di Luca M, Del Manso M, Severini F, Andrianou X, Fortuna C, Remoli ME, Benedetti E, Caporali MG, Fratto F, Mignuoli AD, Rizzo L, De Vito G, De Giorgio V, Surace L, Vairo F, Angelini P, Re MC, Amendola A, Fiorentini C, Marsili G, Toma L, Boccolini D, Romi R, Pezzotti P, Rezza G, Rizzo C. Secondary Autochthonous Outbreak of Chikungunya, Southern Italy, 2017. *Emerg Infect Dis.* 2019 Nov;25(11):2093-2095. doi: 10.3201/eid2511.180949. PMID: 31625839; PMCID: PMC6810187.
24. Schmidt-Chanasit J, Haditsch M, Schoneberg I, Gunther S, Stark K, Frank C. Dengue virus infection in a traveller returning from Croatia to Germany. *Euro Surveill.* 2010 Oct 7;15(40):19677. doi: 10.2807/ese.15.40.19677-en. PMID: 20946759.
25. Seyler T, Rizzo C, Finarelli A C, Po C, Alessio P, Sambri V, Ciofi Degli Atti M L, Salmaso S. Autochthonous chikungunya virus transmission may have occurred in Bologna, Italy, during the summer 2007 outbreak. *Euro Surveill.* 2008;13(3):pii=8015.
<https://doi.org/10.2807/ese.13.03.08015-en>
26. Sousa CA, Clairouin M, Seixas G, Viveiros B, Novo MT, Silva AC, Escoval MT, Economopoulou A. Ongoing outbreak of dengue type 1 in the Autonomous Region of Madeira, Portugal: preliminary report. *Euro Surveill.* 2012 Dec 6;17(49):20333. doi: 10.2807/ese.17.49.20333-en. PMID: 23231893.

27. Succo T, Leparco-Goffart I, Ferré JB, Roiz D, Broche B, Maquart M, Noel H, Catelinois O, Entezam F, Caire D, Jourdain F, Esteve-Moussion I, Cochet A, Paupy C, Rousseau C, Paty MC, Golliot F. Autochthonous dengue outbreak in Nîmes, South of France, July to September 2015. *Euro Surveill.* 2016 May 26;21(21). doi: 10.2807/1560-7917.ES.2016.21.21.30240. PMID: 27254729.
28. Vairo F, Mammone A, Lanini S, Nicastri E, Castillette C, Carletti F, Puro V, Di Lallo D, Panella V, Varrenti D, Scaramozzino P, di Caro A, Scognamiglio P, Capobianchi MR, Ippolito G; Chikungunya Lazio Outbreak Group. Local transmission of chikungunya in Rome and the Lazio region, Italy. *PLoS One.* 2018 Dec 21;13(12):e0208896. doi: 10.1371/journal.pone.0208896. PMID: 30576334; PMCID: PMC6303016.
29. Valerio, Lluís; Roure Díez, Sílvia; Benítez, Rosa; Fernández-Rivas, Gema; Rivaya, Belén; Expósito, Carme; Saperas, Carme; Salvador, Fernando; Clotet, Bonaventura. Intensified epidemiological surveillance of arbovirolosis: First case of native dengue fever in Catalonia (Spain), Northern Metropolitan Area of Barcelona, 2018-2019. *Vigilancia epidemiológica intensificada de arbovirolosis: primer caso de dengue autóctono en Cataluña (España), zona Metropolitana Norte de Barcelona, 2018-2019.* *Aten Primaria* ; 53(1): 73-80, 2021 01.
30. Venturi G, Di Luca M, Fortuna C, Remoli ME, Riccardo F, Severini F, Toma L, Del Manso M, Benedetti E, Caporali MG, Amendola A, Fiorentini C, De Liberato C, Giammattei R, Romi R, Pezzotti P, Rezza G, Rizzo C. Detection of a chikungunya outbreak in Central Italy, August to September 2017. *Euro Surveill.* 2017 Sep;22(39):17-00646. doi: 10.2807/1560-7917.ES.2017.22.39.17-00646. PMID: 29019306; PMCID: PMC5709953.
31. Vermeulen TD, Reimerink J, Reusken C, Giron S, de Vries PJ. Autochthonous dengue in two Dutch tourists visiting Département Var, southern France, July 2020. *Euro Surveill.* 2020 Oct;25(39):2001670. doi: 10.2807/1560-7917.ES.2020.25.39.2001670. Erratum in: *Euro Surveill.* 2020 Oct;25(40). doi: 10.2807/1560-7917.ES.2020.25.39.201008c. PMID: 33006305; PMCID: PMC7531074.
32. Cassaniti I, Ferrari G, Senatore S, Rossetti E, Defilippo F, Maffeo M, Vezzosi L, Campanini G, Sarasini A, Paolucci S, Piralla A, Lelli D, Moreno A, Bonini M, Tirani M, Cerutti L, Paglia S, Regazzetti A, Farioli M, Lavazza A, Faccini M, Rovida F, Cereda D, Baldanti F; Lombardy Dengue network; Lombardy Dengue Network. Preliminary results on an autochthonous dengue outbreak in Lombardy Region, Italy, August 2023. *Euro Surveill.* 2023 Sep;28(37):2300471. doi: 10.2807/1560-7917.ES.2023.28.37.2300471. PMID: 37707980; PMCID: PMC10687988.
33. De Carli G, Carletti F, Spaziant M, Gruber CEM, Rueca M, Spezia PG, Vantaggio V, Barca A, De Liberato C, Romiti F, Scicluna MT, Vaglio S, Feccia M, Di Rosa E, Gianzi FP, Giambi C, Scognamiglio P, Nicastri E, Girardi E, Maggi F, Vairo F; Lazio Dengue Outbreak Group; Lazio dengue Outbreak Group. Outbreaks of autochthonous Dengue in Lazio region, Italy, August to September 2023: preliminary investigation. *Euro Surveill.* 2023 Nov;28(44):2300552. doi: 10.2807/1560-7917.ES.2023.28.44.2300552. PMID: 37917030; PMCID: PMC10623645.
34. Fournet N, Voiry N, Rozenberg J, Bassi C, Cassonnet C, Karch A, Durand G, Grard G, Modenesi G, Lakoussan SB, Tayliam N, Zatta M, Gallien S; investigation team; Noël H, Brichler S, Tarantola A. A cluster of autochthonous dengue transmission in the Paris region - detection, epidemiology and control measures, France, October 2023. *Euro Surveill.* 2023 Dec;28(49):2300641. doi: 10.2807/1560-7917.ES.2023.28.49.2300641. PMID: 38062947; PMCID: PMC10831405.
35. Manica M, Marini G, Solimini A, Guzzetta G, Poletti P, Scognamiglio P, Virgillito C, Della Torre A, Merler S, Rosà R, Vairo F, Caputo B. Reporting delays of chikungunya cases during the 2017 outbreak in Lazio region, Italy. *PLoS Negl Trop Dis.* 2023 Sep 14;17(9):e0011610. doi: 10.1371/journal.pntd.0011610. PMID: 37708121; PMCID: PMC10501639.
36. Vita S, Bordini L, Sberna G, Caputi P, Lapa D, Corpolongo A, Mija C, D'Abramo A, Maggi F, Vairo F, Specchiarello E, Girardi E, Lalle E, Nicastri E. Autochthonous Dengue Fever in 2 Patients, Rome, Italy. *Emerg Infect Dis.* 2024 Jan;30(1):183-184. doi: 10.3201/eid3001.231508. Epub 2023 Nov 15. PMID: 37967518; PMCID: PMC10756386.
37. Zatta M, Brichler S, Vindrios W, Melica G, Gallien S. Autochthonous Dengue Outbreak, Paris Region, France, September-October 2023. *Emerg Infect Dis.* 2023 Dec;29(12):2538-2540. doi: 10.3201/eid2912.231472. Epub 2023 Nov 15. PMID: 37967048; PMCID: PMC10683815.

38. Giron, S., et al. "New occurrence of autochthonous cases of dengue fever in Southeast France, August-September 2014." (2015): 217-223.
39. F Franke, S Giron, A Cochet, C Jeannin, I Leparç-Goffart, H de Valk, F Jourdain, X de Lamballerie, G L'Ambert, M C Paty, Autochthonous chikungunya and dengue fever outbreak in Mainland France, 2010-2018, *European Journal of Public Health*, Volume 29, Issue Supplement_4, November 2019, ckz186.628, <https://doi.org/10.1093/eurpub/ckz186.628>
40. Navero-Castillejos J, Benitez R, Torner N, Muñoz J, Camprubí-Ferrer D, Peiró-Mestres A, Sulleiro E, Silgado A, Gonzalo V, Falgueras T, Alejo-Cancho I, Roldán M, Plasencia V, Albarracin R, Perez J, Navarro A, Calderón A, Rubio R, Navarro M, Micó M, Llaberia J, Navarro M, Barrachina J, Vilamala A, Martí C, Pulido MÁ, Sanchez-Seco MP, Vazquez A, Martínez A, Jané M, Martínez MJ. Molecular Characterization of Imported and Autochthonous Dengue in Northeastern Spain. *Viruses*. 2021 Sep 23;13(10):1910. doi: 10.3390/v13101910. PMID: 34696340; PMCID: PMC8539074.
41. Liumbruno GM, Calteri D, Petropulacos K, Mattivi A, Po C, Macini P, Tomasini I, Zucchelli P, Silvestri AR, Sambri V, Pupella S, Catalano L, Piccinini V, Calizzani G, Grazzini G. The Chikungunya epidemic in Italy and its repercussion on the blood system. *Blood Transfus*. 2008 Oct;6(4):199-210. doi: 10.2450/2008.0016-08. PMID: 19112735; PMCID: PMC2626913.
42. Guzzetta G, Vairo F, Mammone A, Lanini S, Poletti P, Manica M, Rosa R, Caputo B, Solimini A, Torre AD, Scognamiglio P, Zumla A, Ippolito G, Merler S. Spatial modes for transmission of chikungunya virus during a large chikungunya outbreak in Italy: a modeling analysis. *BMC Med*. 2020 Aug 7;18(1):226. doi: 10.1186/s12916-020-01674-y. PMID: 32762750; PMCID: PMC7412829.
43. Kurolt IC, Betica-Radić L, Daković-Rode O, Franco L, Zelená H, Tenorio A, Markotić A. Molecular characterization of dengue virus 1 from autochthonous dengue fever cases in Croatia. *Clin Microbiol Infect*. 2013 Mar;19(3):E163-5. doi: 10.1111/1469-0691.12104. Epub 2012 Dec 22. PMID: 23279586.
44. ECDC. Rapid Risk Assessment: Local transmission of dengue fever in France and Spain, 22 October 2018. Stockholm: ECDC, 2018
45. Centro de Coordinación de Alertas y Emergencias Sanitarias; Ministerio de Sanidad, Consumo y Bienestar Social. Primeros casos de dengue autóctono en España. Actualización noviembre 2018. (website), 2018
46. ECDC. Rapid risk assessment: Autochthonous cases of dengue in Spain and France, 1 October 2019. Stockholm: ECDC, 2019
47. Santé publique France, Agence regionale de santé Auvergne-Rhone-Alpes. Surveillance épidémiologique en région Auvergne-Rhone-Alpes. 14 October to 20 October 2019. *Bulletin*, 2019.
48. Santé publique France, Agence régionale de santé Occitanie. Un cas autochtone de dengue confirmé dans l'Hérault. 31 July 2020. *Communiqué de presse*, 2020.
49. Santé publique France. Chikungunya, dengue et zika - Données de la surveillance renforcée en France métropolitaine en 2020. *Bulletin*, 2020.
50. Santé publique France. Surveillance des infections par les virus de la dengue, du chikungunya et du zika en France métropolitaine : données de l'année 2021. *Bulletin*, 2021.
51. Santé publique France. Chikungunya, dengue et zika - Données de la surveillance renforcée en France métropolitaine en 2022. *Bulletin*, 2022.
52. Centro de Coordinación de Alertas y Emergencias Sanitarias; Ministerio de Sanidad, Consumo y Bienestar Social. Agrupación de casos de dengue autóctono en Ibiza, 28 febrero de 2023. *Website*, 2023.
53. Agence Régionale de Santé Provence-Alpes-Côte d'Azur (ARS PACA). Bouches-du-Rhône : démostication et surveillance renforcée après la détection de deux cas autochtones de dengue. *Communiqué de presse*, 2023.
54. Agence Régionale de Santé Île-de-France. Lutte anti-vectorielle : l'ARS confirme un 1er cas autochtone de dengue en Île-de-France et engage deux actions de démostication à Limeil-Brévannes (94). *Communiqué de presse*, 2023.
55. Santé publique France. Chikungunya, dengue et zika - Données de la surveillance renforcée en France métropolitaine en 2023. *Bulletin*, 2023.
56. Istituto Superiore di Sanità (ISS). Febbre dengue: Ultimi aggiornamenti. Rome: ISS; 2023. Available at: <https://www.epicentro.iss.it/febbre-dengue/aggiornamenti>

57. Agència de Salut Pública de Catalunya (ASPCAT). Actualització nota informativa del dengue, 2023. Available at: <https://salutpublica.gencat.cat/ca/detalls/Article/271023-dengue>
58. Istituto Superiore di Sanità (ISS). Italy: autochthonous cases of chikungunya virus (updated 21 December 2017), Roma 2017. Available from: http://www.salute.gov.it/portale/temi/documenti/chikungunya/bollettino_chikungunya_20171221.pdf

Supplementary File 4:

- 1. Data per record**
- 2. Data per outbreak**
- 3. Quality appraisal**

Outbreak	Country	Location/area involved in the outbreak	Extension of the outbreak	Type of area involved in the outbreak (urban/suburban/rural/all)	Total number of autochthonous cases confirmed	Dengue serotype	Index case's symptoms	Conditions that elicits aviral testing	Country where primary case got infected	Date of primary case's symptoms onset	Date of primary case's diagnosis	Date of index case's symptoms onset	Date of index case's sample collection	Date of index case's diagnosis	Date of first symptomatic case	Date of last case's symptoms onset	Date of last case's diagnosis	Date of beginning of reactive interventions	Time to outbreak recognition, from index case's onset (days)	Time to outbreak recognition, real (days)	Autochthonous outbreak duration, from index case's symptoms onset (days)	Autochthonous outbreak duration, real (days)	Comments	
Chikungunya 2007	Italy	Castiglione di Cervia, Castiglione di Ravenna (mainly), Cervia, Cesena, Rimini, Bologna, Ravenna	Exported	All	217	Not applicable	NA	Multiple number of cases of fever of unknown origin, suspected to be viral	India	23/06/2007 or 15/06/2007	NA	NA	NA	30/08/07	04/07/07	28/09/07	28/09/07	18/08/07	#VALUE!	57	#VALUE!	86	Incongruent data on primary cases's symptom onset; last case's symptom onset was reported wrong in Caputo study (20/11/2007, which was when the outbreak was declared over officialy)	
Chikungunya 2010	France	Frejus	Focal	Urban	2	Not applicable	Fever, arthralgia, backache, headache, retroorbital pain	Presence of known primary case living nearby	India	29/08/10	NA	18/09/10	NA	NA	18/09/10	18/09/10	NA	NA	#VALUE!	#VALUE!	0	0		
Chikungunya 2014	France	Montpellier	Focal	Urban	11	Not applicable	Fever, arthralgia, myalgia, rash	NA	Cameroon	30/08/14	05/09/14	18/09/14	23/09/14	01/10/14	08/09/14	22/10/14	22/10/14	19/10/14	13	23	34	44	+1 probable case	
Chikungunya 2017	France	Le Cannet-des-Maures and Taradeau, Department of Var	Local	Suburban and rural	15	Not applicable	Fever, arthralgia of wrists and fingers, oedema of extremities	NA	Cameroon	11/07/17	NA	02/08/17	NA	09/08/17	28/07/17	09/09/17	NA	10/08/17	7	12	38	43	+2 possible but not confirmed cases	
Chikungunya 2017	Italy	Anzio, Rome, Guardavalle Marina + many other small villages in Italy and Europe	Exported	All	270	Not applicable	Fevere, severe joint pain, rash	NA	NA	NA	NA	05/08/17	NA	06/09/2017 or 07/09/2017	26/06/17	05/11/17	NA	07/09/17	#VALUE!	#VALUE!	92	132	499 with probable cases. Index cases' diagnosis on 06/09 (some studies reported 07/09, but the first sample results was received on 06/09)	
Dengue, 2010	France	Nice	Focal	Urban	2	DENV1	Fever, myalgia, asthenia	Routine enhanced surveillance system	Martinique	19/07/10	NA	23/08/10	27/08/10	27/08/10	23/08/10	11/09/10	13/09/10	NA	4	4	19	19		
Dengue, 2010	Croatia	Pejeljac and Korčula.	Local	Rural	9	DENV1	Fever, chills, arthralgia, headache, retro-orbital pain, myalgia, weakness, dyspnea	General clinical picture, suspected by GP	NA	NA	NA	16/08/10	23/08/10	30/09/10	NA	NA	NA	NA	45	#VALUE!	#VALUE!	#VALUE!		
Dengue, 2012	Madeira, Portugal	Funchal and neighbouring	Local	All	1080	DENV1	Fever, nausea, vomiting, anorexia, abdominal pain, diarrhea, prostration, rash	NA	NA	NA	NA	20/09/12	26/09/12	03/10/12	NA	NA	03/03/13	NA	13	#VALUE!	#VALUE!	#VALUE!	2,168 probable or confirmed cases overall	
Dengue, 2013	France	Venelles (Bouches- du-Rhône)	Focal	Urban	1	DENV2	Fever, myalgia, rash	NA	Guadeloupe	19/09/13	14/11/13	11/10/13	16/10/2013 oppure 17/10/2013	21/10/2013 oppure 24/10/2013	Not applicable	Not applicable	Not applicable	#VALUE!	#VALUE!	#VALUE!	#VALUE!			
Dengue, 2014	France	Toulon (Var department)	Focal	Urban	1	DENV1	Fever, asthenia, arthralgia, mialgia, retro-orbital pain, headache, nausea, rash	NA	NA	NA	NA	05/08/14	07/08/14	20/08/14	Not applicable	Not applicable	Not applicable	21/08/14	15	#VALUE!	#VALUE!	#VALUE!		
		Toulon (Var department)	Focal	Urban	1	DENV2	Asthenia, arthralgia, mialgia (legs), fever	NA	NA	NA	NA	03/09/14	06/09/14	10/09/14	Not applicable	Not applicable	Not applicable	11/09/14	7	#VALUE!	#VALUE!	#VALUE!		
		Aubagne (Bouches- du-Rhône)	Focal	Urban	2	DENV2	Fever, headache, arthralgia, mialgia, retro-orbital pain, abdominal pain, anorexia e asthenia	NA	Thailand	27/07/14	NA	24/08/14	02/09/14	18/09/14	24/08/14	19/09/14	29/09/14	17/09/14	25	25	26	26	Reactive interventions begun before confirmation, only on the basis of IgM positivity (probable autochthonous case)	
Dengue, 2015	France	Nîmes	Focal	Urban	6	DENV1	Fever, headache, retro-orbital pain, myalgia, rash, asthenia	NA	French Polynesia	04/07/15	14/07/15	08/08/15	14/08/15	14/08/15	24/07/15	11/09/15	16/09/15	18/08/15	6	21	34	49	+2 probable cases	
Dengue, 2018	France	Clapiers (Hérault)	Focal	Suburban	2	DENV1	NA	NA	NA	27/09/18	NA	10/10/18	27/09/18	10/10/18	27/09/18	08/10/18	NA	NA	13	13	11	11		
		Saint-Laurent-du-Var (Alpes-Maritimes)	Focal	Urban	5	DENV2	NA	NA	NA	NA	NA	21/09/18	NA	04/10/18	03/09/18	03/10/18	NA	NA	13	31	12	30		
		Nîmes	Focal	Urban	1	DENV1	NA	NA	French Polynesia	27/08/18	NA	02/10/18	NA	NA	Not applicable	Not applicable	Not applicable	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
Dengue, 2018	Spain	Murcia area	Local	Urban and rural	5	DENV1	NA	NA	NA	NA	NA	18/08/18	03/09/18	04/10/18	18/08/18	30/09/18	26/10/18	08/10/18	47	47	43	43		
		Badalona	Focal	Urban	1	DENV1	Fever, headache, weakness, nausea, rash	Clinical picture, no other diagnoses detected	NA	NA	NA	17/10/18	NA	15/11/18	Not applicable	Not applicable	Not applicable	15/11/18	29	#VALUE!	#VALUE!	#VALUE!		
		Vallauris, Alpes-Maritimes Department	Focal	Urban	5	DENV1	NA	NA	NA	11/07/19	NA	30/08/19	07/09/19	20/09/19	01/08/19	21/09/19	26/09/19	19/09/19	8	50	22	51		
Dengue, 2019	France	Caluire-et-Cuire (Auvergne-Rhône-Alpes Department)	Focal	Urban	2	NA	NA	NA	South-East Asia	30/06/19	NA	NA	NA	NA	NA	NA	NA	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!	Reactive interventions began before diagnoses confirmation due to suspicion	
Dengue, 2019	Spain	Barcelona county	Focal	NA	1	NA	High fever, headache, rash	NA	NA	NA	NA	06/09/19	NA	16/09/19	Not applicable	Not applicable	Not applicable	NA	10	#VALUE!	#VALUE!	#VALUE!		
Dengue, 2020	France						Fever, myalgia, nausea, vomit, rash, virus disturbance, thrombocytopenia, leukocytopenia, plasmocytosis, moderately elevated liver enzymes	NA	NA	NA	NA	01/08/20	12/08/20	NA	01/08/20	11/08/20	07/09/20	NA	#VALUE!	#VALUE!	10	10		
		Nice	NA	Urban	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	11/08/20	04/09/20	NA	NA	#VALUE!	#VALUE!	24	#REF!		
		Saint Laurent du Var	NA	Urban	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	19/09/20	04/10/20	NA	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
		Cesemon-sur-Orb (Hérault)	Focal	Rural	1	NA	NA	NA	NA	NA	NA	17/07/20	NA	NA	Not applicable	Not applicable	Not applicable	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
		Hérault or Gard Department	Focal	NA	1	NA	NA	NA	NA	NA	NA	31/08/20	NA	NA	Not applicable	Not applicable	Not applicable	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
		Gard Department	Focal	NA	1	NA	NA	NA	NA	NA	NA	03/09/20	NA	NA	Not applicable	Not applicable	Not applicable	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
Dengue, 2020	Italy	Montecchio Maggiore (VI)	Focal	Rural	11	DENV1	Fever, arthralgia, myalgia, pruritus, headache	Report of a relative with the same symptoms who had just returned from Sumatra	Indonesia	30/07/20	26/08/20	16/08/20	NA	22/08/20	11/08/20	29/09/20	08/10/20	26/08/20	6	11	44	49		
Dengue, 2021	France	Var Department	Focal	NA	1	DENV1	NA	NA	NA	NA	NA	16/07/21	NA	NA	Not applicable	Not applicable	Not applicable	02/08/21	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
		Hérault Department	Focal	NA	1	NA	NA	NA	NA	NA	NA	20/09/21	NA	23/11/21	Not applicable	Not applicable	Not applicable	22/11/21	130	#VALUE!	#VALUE!	#VALUE!		
		Saint-Jeannet and Gattières	NA	Suburban	34	DENV3	NA	NA	NA	NA	NA	NA	NA	NA	25/07/22	22/09/22	NA	NA	#VALUE!	#VALUE!	#VALUE!	59		
Dengue, 2022	France	Saint-Laurent-du-Var	NA	Urban	10	DENV1	NA	NA	NA	NA	NA	NA	NA	NA	15/08/22	16/09/22	NA	NA	#VALUE!	#VALUE!	#VALUE!	32		
		Fayence	NA	Rural	7	DENV1	NA	NA	NA	NA	NA	NA	NA	NA	20/06/22	22/07/22	NA	NA	#VALUE!	#VALUE!	#VALUE!	32		
		Andrest and Rabastens-de-Bigorre	NA	Rural	4	DENV1	NA	NA	Reunion Island	NA	NA	NA	NA	NA	11/07/22	28/08/22	NA	NA	#VALUE!	#VALUE!	#VALUE!	48		
		La Salvetat-Saint-Gilles	NA	Suburban	4	DENV3	NA	NA	Democratic Republic of the Congo	NA	NA	NA	NA	NA	14/08/22	20/08/22	NA	NA	#VALUE!	#VALUE!	#VALUE!	6		
		Tolosa	NA	Urban	2	DENV3	NA	NA	NA	NA	NA	NA	NA	NA	15/09/22	21/09/22	NA	NA	#VALUE!	#VALUE!	#VALUE!	6		
		Porto Vecchio (Corsica)	Focal	Rural	2	DENV3	NA	NA	NA	NA	NA	NA	NA	NA	20/09/22	20/09/22	NA	NA	#VALUE!	#VALUE!	#VALUE!	0		
		Montauban	Focal	Suburban	1	NA	NA	NA	NA	NA	NA	30/08/22	NA	NA	Not applicable	Not applicable	Not applicable	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
Dengue, 2022	France	Perpignan	Focal	Suburban	1	DENV3	NA	NA	NA	NA	NA	12/06/22	NA	NA	Not applicable	Not applicable	Not applicable	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
Dengue, 2022	Spain	Ibiza	Focal	NA	1	NA	Fever, rash, joint pain	NA	Mexico	11/08/22	01/09/22	31/08/22	NA	08/09/22	Not applicable	Not applicable	Not applicable	NA	8	#VALUE!	#VALUE!	#VALUE!	#VALUE!	+5 probable cases. Only from a bulletin of the Centro de Coordinación de Alertas y Emergencias Sanitarias
Dengue, 2023	France	Limeil-Brévanne (Paris Region)	Focal	Urban	3	DENV2	Fever (>38°C), malaise, headache, nausea and vomiting	NA	Antille (not better specified)	NA	NA	13/09/23	22/09/23	11/10/23	11/09/23	14/09/23	13/10/23	15/10/23	28	30	1	3		
		Gardanne dans les Bouches-du-Rhône (PACA)	Focal	Urban	4	DENV2	NA	NA	Martinique	NA	NA	NA	NA	NA	NA	NA	NA	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
		Nice dans les Alpes-Maritimes (PACA)	Focal	Urban	2	DENV2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
		Boulbon dans les Bouches-du-Rhône (PACA)	Focal	Rural	10	DENV1	NA	NA	Africa (not better specified)	NA	NA	NA	NA	NA	NA	NA	NA	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
		Antibes dans les Alpes-Maritimes (PACA)	Focal	Urban	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	Not applicable	Not applicable	Not applicable	NA	#VALUE!	#VALUE!	#VALUE!	#VALUE!		
		Perpignan dans les Pyrénées Orientales (Occitanie)	Focal	Urban	11	DENV2	NA	NA	Martinique	NA	NA	NA	NA	NA	NA	NA	NA	NA	#VALUE!</					

	Title	Were there clear criteria for inclusion in the case series?	Was the condition measured in a standard, reliable way for all participants included in the case series?	Were valid methods used for identification of the condition for all participants included in the case series?	Did the case series have consecutive inclusion of participants?	Did the case series have complete inclusion of participants?	Was there clear reporting of the demographics of the participants in the study?	Was there clear reporting of clinical information of the participants?	Were the outcomes or follow up results of cases clearly reported?	Was there clear reporting of the presenting site(s)/ clinic(s) demographic information?	Was statistical analysis appropriate?	Total score
Alves MJ et al.	Clinical presentation and laboratory findings for the first autochthonous cases of dengue fever in Madeira island, Portugal, October 2012	Yes	Yes	Yes	Yes	No	No	No	Not applicable	Yes	Not applicable	5
Angelini P et al.	Chikungunya emergency in Emilia-Romagna: learning through experience	Yes	Unclear	Yes	Yes	Yes	No	No	Not applicable	Unclear	Not applicable	5
Angelini P et al.	Chikungunya epidemic outbreak in Emilia-Romagna (Italy) during summer 2007	Unclear	Unclear	Yes	Yes	Yes	Yes	Yes	Not applicable	Yes	Not applicable	7
Angelini R et al.	An outbreak of chikungunya fever in the province of Ravenna, Italy	No	Unclear	Unclear	Yes	No	No	No	Not applicable	Unclear	Not applicable	2.5
Angelini R et al.	Chikungunya in north-eastern Italy: a summing up of the outbreak	Yes	Yes	Yes	Yes	No	No	No	Not applicable	Yes	Not applicable	5
Barzon L et al.	Autochthonous dengue outbreak in Italy 2020: Clinical, virological and entomological findings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not applicable	Yes	Not applicable	8
Calba C et al.	Preliminary report of an autochthonous chikungunya outbreak in France, July to September 2017	Yes	Yes	Yes	Yes	No	Yes	Yes	Not applicable	Yes	Not applicable	7
Caputo B et al.	A comparative analysis of the 2007 and 2017 Italian chikungunya outbreaks and implication	Yes	Unclear	Unclear	Yes	Yes	Unclear	Yes	Not applicable	Yes	Not applicable	6.5
Cochet A et al.	Autochthonous dengue in mainland France, 2022: geographical extension and incidence	Yes	Unclear	Unclear	Yes	Yes	No	Yes	Not applicable	Yes	Not applicable	6
Delisle E et al.	Chikungunya outbreak in Montpellier, France, September to October 2014	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not applicable	Yes	Not applicable	8
Giron S et al.	Vector-borne transmission of Zika virus in Europe, southern France, August 2019	Yes	Unclear	Unclear	Yes	Yes	Unclear	Yes	Not applicable	Yes	Not applicable	6.5
Gjenero-Margan et al.	Autochthonous dengue fever in Croatia, August-September 2010	Unclear	Unclear	Unclear	Yes	Yes	No	No	Not applicable	Unclear	Not applicable	4
Gould EA et al.	First cases of autochthonous dengue fever and chikungunya fever in France: from bad dream to reality!	No	Unclear	Unclear	Yes	Yes	Yes	Unclear	Not applicable	Yes	Not applicable	5.5
Grandadam M et al.	Chikungunya virus, Southeastern France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not applicable	Yes	Not applicable	8
La Ruche G et al.	First two autochthonous dengue virus infections in metropolitan France, September 2010	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not applicable	Yes	Not applicable	8
Lazzarini L et al.	First autochthonous dengue outbreak in Italy, August 2020	Yes	Yes	Yes	Yes	No	Yes	Yes	Not applicable	Yes	Not applicable	7
Manica M et al.	Transmission dynamics of the ongoing chikungunya outbreak in Central Italy: From coastal areas to the metropolitan city of Rome, summer 2017	Unclear	Unclear	Unclear	Unclear	No	No	No	Not applicable	Yes	Not applicable	3
Marchand E et al.	Autochthonous case of dengue in France, October 2013	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not applicable	Yes	Not applicable	8
Monge S et al.	Characterization of the first autochthonous dengue outbreak in Spain (August-September 2018)	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Not applicable	Yes	Not applicable	7.5
Paty, M C	[Dengue fever in mainland France]	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Not applicable	Unclear	Not applicable	7
Rezza, G	Chikungunya is back in Italy: 2007-2017	Yes	No	Yes	Yes	No	Unclear	Unclear	Not applicable	Yes	Not applicable	5
Rezza G et al.	Infection with chikungunya virus in Italy: an outbreak in a temperate region	Yes	No	No	Yes	No	No	Unclear	Not applicable	Yes	Not applicable	3.5
Riccardo F et al.	Secondary Autochthonous Outbreak of Chikungunya, Southern Italy, 2017	Yes	Unclear	Yes	Yes	Yes	No	Unclear	Not applicable	Yes	Not applicable	6
Schmidt-Chanasit J et al.	Dengue virus infection in a traveller returning from Croatia to Germany	Yes	Yes	Yes	Yes	No	Unclear	Yes	Not applicable	Yes	Not applicable	6.5
Seyler T et al.	Autochthonous chikungunya virus transmission may have occurred in Bologna, Italy, during the summer 2007 outbreak	Yes	Unclear	Unclear	Yes	Unclear	No	No	Not applicable	Yes	Not applicable	4.5
Sousa CA et al.	Ongoing outbreak of dengue type 1 in the Autonomous Region of Madeira, Portugal: preliminary report	Yes	Yes	Unclear	Yes	No	No	No	Not applicable	Yes	Not applicable	4.5
Succo T et al.	Autochthonous dengue outbreak in Nîmes, South of France, July to September 2015	Yes	Yes	Unclear	Yes	Yes	Yes	Unclear	Not applicable	Yes	Not applicable	7
Vairo F et al.	Local transmission of chikungunya in Rome and the Lazio region, Italy	Yes	Yes	Yes	Yes	No	Unclear	No	Not applicable	Yes	Not applicable	5.5
Valerio F et al.	Intensified epidemiological surveillance of arboviruses: First case of native dengue fever in Catalonia (Spain), Northern Metropolitan Area of Barcelona, 2018-2019	Yes	Yes	Unclear	Yes	Yes	No	No	Not applicable	Unclear	Not applicable	5
Venturi G et al.	Detection of a chikungunya outbreak in central Italy, August to September 2017	Yes	Unclear	Unclear	Yes	No	Unclear	Unclear	Not applicable	Unclear	Not applicable	4.5
Vermeulen TD et al.	Autochthonous dengue in two Dutch tourists visiting Département Var, southern France, July 2020	Yes	Yes	Unclear	Yes	No	Unclear	Unclear	Not applicable	Yes	Not applicable	5.5
Cassaniti I et al.	Preliminary results on an autochthonous dengue outbreak in Lombardy Region, Italy, August 2023	Yes	Yes	Yes	Yes	No	Yes	Yes	Not applicable	Unclear	Not applicable	6.5
De Carli G et al.	Outbreaks of autochthonous Dengue in Lazio region, Italy, August to September 2023: preliminary investigation	Yes	Unclear	Unclear	Yes	No	Unclear	Unclear	Not applicable	Unclear	Not applicable	4.5
Fournet N et al.	A cluster of autochthonous dengue transmission in the Paris region - detection, epidemiology and control measures, France, October 2023.	Yes	Unclear	Yes	Yes	Yes	Yes	Yes	Not applicable	Unclear	Not applicable	7
Manica M et al.	Reporting delays of chikungunya cases during the 2017 outbreak in Lazio region, Italy	Yes	Yes	Yes	Yes	No	Unclear	No	Not applicable	Yes	Not applicable	5.5
Vita S et al.	Autochthonous Dengue Fever in 2 Patients, Rome, Italy	Yes	Yes	Yes	No	No	Yes	Yes	Not applicable	Yes	Not applicable	6
Zatta M et al.	Autochthonous Dengue Outbreak, Paris Region, France, September-October 2023	Yes	Unclear	Yes	Yes	Yes	Yes	Unclear	Not applicable	Yes	Not applicable	7
Giron S et al.	New occurrence of autochthonous cases of dengue fever in Southeast France, August-September 2014	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not applicable	Yes	Not applicable	8
Franke F et al.	Autochthonous chikungunya and dengue fever outbreak in mainland France, 2010-2018	Yes	Yes	Yes	Yes	Yes	Unclear	No	Not applicable	Yes	Not applicable	6.5
Navero-Castillejos J et al.	Molecular characterization of imported and autochthonous dengue in northeastern Spain	Yes	Yes	Yes	Yes	Yes	No	Yes	Not applicable	No	Not applicable	6
Liubruno GM et al.	The Chikungunya epidemic in Italy and its repercussion on the blood system	Yes	Yes	Unclear	Yes	Yes	Unclear	Yes	Not applicable	Yes	Not applicable	7
Guzzetta G. et al.	Spatial modes for transmission of chikungunya virus during a large chikungunya outbreak in Italy: a modeling analysis	Yes	Unclear	Unclear	Yes	No	Unclear	Unclear	Not applicable	Yes	Not applicable	5
Kurult I.C. et al.	Molecular characterization of dengue virus 1 from autochthonous dengue fever cases in Croatia	Unclear	Yes	Yes	No	No	No	Unclear	Not applicable	Unclear	Not applicable	3.5
European Centre for Disease Prevention and Control (ECDC)	Rapid Risk Assessment: Local transmission of dengue fever in France and Spain, 22 October 2018	Yes	Unclear	Unclear	Yes	No	Yes	No	Not applicable	Yes	Not applicable	5
Centro de Coordinación de Alertas y Emergencias Sanitarias; Ministerio de Sanidad, Consumo y Bienestar Social.	Primeros casos de dengue autóctono en España. Actualización noviembre 2018.	Yes	Yes	Yes	Yes	Yes	Yes	No	Not applicable	Unclear	Not applicable	6.5
European Centre for Disease Prevention and Control (ECDC)	Rapid risk assessment: Autochthonous cases of dengue in Spain and France, 1 October 2019	Yes	Yes	Yes	Yes	Yes	Unclear	Unclear	Not applicable	Unclear	Not applicable	6.5
Santé publique France, Agence regionale de santé Auvergne-Rhone-Alpes	Surveillance épidémiologique en région Auvergne-Rhone-Alpes. 14 October to 20 October 2019	Yes	Unclear	Unclear	Yes	Unclear	No	No	Not applicable	Yes	Not applicable	4.5
Santé publique France, Agence régionale de santé Occitanie	Un cas autochtone de dengue confirmé dans l'Hérault. 31 July 2020	Yes	Unclear	Unclear	Yes	No	No	No	Not applicable	Yes	Not applicable	4
Santé publique France	Chikungunya, dengue et zika - Données de la surveillance renforcée en France métropolitaine en 2020	Yes	Unclear	Unclear	Yes	Yes	No	No	Not applicable	Unclear	Not applicable	4.5
Santé publique France	Surveillance des infections par les virus de la dengue, du chikungunya et du zika en France métropolitaine : données de l'année 2021	Yes	Unclear	Unclear	Yes	Yes	Unclear	No	Not applicable	No	Not applicable	4.5
Santé publique France	Chikungunya, dengue et zika - Données de la surveillance renforcée en France métropolitaine en 2022	Yes	Unclear	Unclear	Yes	Yes	No	No	Not applicable	Yes	Not applicable	5
Centro de Coordinación de Alertas y Emergencias Sanitarias; Ministerio de Sanidad, Consumo y Bienestar Social.	Agrupación de casos de dengue autóctono en Ibiza, 28 febrero de 2023	Yes	Yes	Yes	Yes	Yes	Yes	Unclear	Not applicable	Unclear	Not applicable	7
Agence Régionale de Santé Provence-Alpes-Côte d'Azur (ARS PACA)	Bouches-du-Rhône: démonsitcation et surveillance renforcée après la détection de deux cas autochtones de dengue	Yes	Unclear	Unclear	Yes	Yes	No	No	Not applicable	Unclear	Not applicable	4.5
Agence Régionale de Santé Île-de-France	Lutte anti-vectorielle : l'ARS confirme un 1er cas autochtone de dengue en Île-de-France et engage deux actions de démonsitcation à Limeil-Brévannes (94)	Yes	Unclear	Unclear	Yes	No	No	No	Not applicable	Yes	Not applicable	4
Santé publique France	Chikungunya, dengue et zika - Données de la surveillance renforcée en France métropolitaine en 2023	Yes	Unclear	Unclear	Yes	Yes	No	No	Not applicable	Yes	Not applicable	5
Istituto Superiore di Sanità (ISS)	Febbre dengue: Ultimi aggiornamenti. Rome: ISS; 2023.	Yes	Unclear	Unclear	Yes	Yes	No	No	Not applicable	No	Not applicable	4
Agencia de Salud Pública de Cataluña (ASPCAT)	Actualització nota informativa del dengue, 2023	Yes	Unclear	Unclear	Yes	Yes	No	No	Not applicable	Unclear	Not applicable	4.5
Istituto Superiore di Sanità (ISS)	Italy: autochthonous cases of chikungunya virus (updated 21 December 2017), Roma 2017	Yes	Unclear	Unclear	Yes	Yes	Unclear	No	Not applicable	Yes	Not applicable	5.5
European Centre for Disease Prevention and Control (ECDC)	Dengue outbreak in Madeira, Portugal March 2013	Yes	Yes	Unclear	Yes	Yes	No	No	Not applicable	Yes	Not applicable	5.5

Proposed synthesis:
>6 = high quality
5-6 = moderate quality
<5 = low quality