# A Study of Malaria in Rajasthan

# Arvind Nath

How to cite this article: Arvind Nath/A Study of Malaria in Rajasthan/Indian J Prev Med. 2023;11(1):27-30.

#### Abstract

*Background:* To the best knowledge of the author, there is no available literature on the current status of Malaria in Rajasthan. Hence the preparation of this document.

**Objectives:** To find out the parameters of Malaria in Rajasthan till as recently as possible.

*Methods:* By studying the documents prepared by the National Centre for Vector Borne Diseases (NCVBD) and doing a web search on Malaria in Rajasthan.

*Results:* It is seen that the Annual Parasite Incidence (API) of Malaria in Rajasthan had come down to the low level of 0.07 in 2018 and that there were only 649 cases of Malaria in Rajasthan during 2021 as of September 11th of that year.

*Conclusions:* Rajasthan is very close to achieving near-elimination goals but will have to take active measures to reach it.

Keywords: Malaria; Rajasthan; API; NCVBD; WHO.

## INTRODUCTION

Rajasthan is in the north-western part of India. Rajasthan is in the north-western part of India. It is bordered by Punjab in the north, Pakistan in the north-west, Gujarat in the south-west, Haryana, and Uttar Pradesh in the north-east and Madhya Pradesh in the south-east.

E-mail: natha.hq@icmr.gov.in Received on: 02.06.2022 Accepted on: 05.07.2022

## **MATERIAL & METHODS**

The study design included analysis of the annual reports of the Malaria Division of the National Centre for Vector Borne Diseases Control (NCVBDC) for 2017 and 2018 and a web search for information on Malaria in Rajasthan.

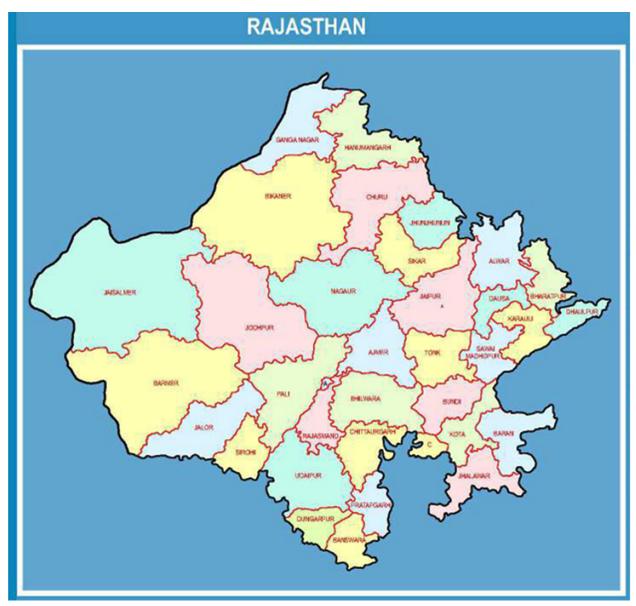
## RESULTS

According to the most recent data available on the NCVBDC website (data for 2018), the API forRajasthan was 0.07.<sup>2</sup> It's comparison with the API from 2017 can be seen from the following table:

Thus, there was a halving of the API in Rajasthan between 2017 and 2018.

**Author Affiliation:** Scientist 'E', ICMR-National Institute of Malaria Research, Dwarka, New Delhi 110077, India.

Corresponding Author: Arvind Nath, Scientist 'E', ICMR-National Institute of Malaria Research, Dwarka, New Delhi 110077, India.



\_

Fig. 1: Map of Rajasthan State [Source: (1)]

In 2018, the API was not uniform throughout the state but varied from district to district. This can be seen from the following table:

Table 1: API of	Rajasthan,	2017 and	2018
-----------------	------------	----------	------

State	Ye	ear
	2017	2018
Rajasthan	0.14	0.07

Sources: (2) and (3)

Further search revealed the following information on Malaria cases in Rajasthan during 2020 and 2021 and is shown in the following table:

 Table 2: API of the Districts of Rajasthan, 2018

S. No.	District	API
1	Alwar	0.04
2	Dausa	0.01
3	Jaipur	0.02
4	Jhunjhunu	0.01
5	Sikar	0.01
6	Bharatpur	0.09
7	Dholpur	0.03

Table Cont....

Indian Journal of Preventive Medicine / Volume 11 Number 1 / January - June 2023

8	Karauli	0.01
9	SawaiMadhopur	0.02
10	Bikaner	0.03
11	Sri Ganganagar	0.03
12	Hanumangarh	0.03
13	Churu	0.06
14	Barmer	0.09
15	Jaiselmer	0.11
16	Jalore	0.03
17	Jodhpur	0.03
18	Pali	0.09
19	Sirohi	0.10
20	Banswara	0.14
21	Chittorgarh	0.13
22	Dungarpur	0.34
23	Rajsamand	0.24
24	Pratapgarh	0.33
25	Udaipur	0.31
26	Bundi	0.08
27	Baran	0.17
28	Jhalawar	0.05
29	Kota	0.09
30	Ajmer	0.01
31	Bhilwara	0.03
32	Nagaur	0.05
33	Tonk	0.01
State	Rajasthan	0.07

#### Source: (2)

Table 3: Data on Malaria Cases in Rajasthan, 2020 and 2021

<b>Reference</b> Period	Number of Malaria Cases
September 2020	449
Till September 11, 2021	649

Sources: (4)

Indian Journal of Preventive Medicine / Volume 11 Number 1 / January - June 2023

### DISCUSSION

Beginning in 2017, there was a decline in the incidence of Malaria in Rajasthan with a mild increase during 2021.

In 2016, the Government of India adopted a framework for Malaria Elimination in India covering the period 2016 – 2030.<sup>5</sup> This was based on WHO's Global Technical Strategy for Malaria covering the period 2016 – 2030 which was adopted in 2015 and updated in 2021.<sup>6</sup>

The aim is to reach zero Malaria cases by 2027 and then wait for three years before WHO can grant Malaria-free status certification. It is already nearly the middle of 2022 and India is about to reach the halfway mark of the period from 2016 to 2027.

## CONCLUSION

Although Rajasthan did not reach zero Malaria cases in 2021, it did reach an API of 0.07during 2018. Therefore, it is a good candidate for being the first state in the country close to being able to achieve near-elimination goals.

Acknowledgements: Nil

#### REFERENCES

- Registrar General and Census Commissioner of India 2011. Map of Rajasthan. Available at https://censusindia.gov.in/nada/index.php/ catalog/45 Accessed on 1June 2022.
- Government of India. Annual Report of National Vector-Borne Disease Control Programme 2018. Available from: https:// nvbdcp.gov.in/Doc/Annual-Report-2018.pdf Accessed on 25 August 2021.
- Government of India. Annual Report of National Vector-Borne Disease Control Programme 2017. Available at https://nvbdcp. gov.in/Doc/Annual-Report-2017.pdf Accessed on 31 August 2021.
- https://timesofindia.indiatimes.com/city/ jaipur/vector-borne-diseases-on-the-risesept-oct-crucial/articleshow/86102246.cms Accessed on 1 June 2022.
- Government of India. National Framework for Malaria Elimination in India 2016 – 2030. Available at https://nvbdcp.gov.in/ WriteReadData/1892s/National-frameworkfor-malaria-elimination-in-India-2016% E2%80%932030.pdf Accessed on 17 September 2021.
- World Health Organization. Global Technical Strategy for Malaria 2016 – 2030. Available at

2021.

https://www.who.int/publications/i/item /9789240031357 Accessed on 17 September

