

## What did we do in this study?

Between November 2022 and February 2023, we conducted two RAABs in Segou and Sikasso regions, Mali, to assess the prevalence and causes of blindness and visual impairment.

## How did we do it?

For each region, a sampling frame listing all the villages and their populations was obtained from regional delegations of health. To ensure the safety and security of the study teams, all locations were risk assessed. The final sampling frame for Segou included two districts (San and Bla) and secure parts of Segou, Baroueli, Macina and Tominian districts. In Sikasso, the sampling frame was made up of four whole districts (Bougouni, Kolondieba, Kadiolo and Yanfolila) and part of Sikasso district.

50 people in each of 44 clusters (2,200 people in total) were randomly selected to participate in each region. We examined their eyes and asked them questions about their eye health, health-seeking behaviour, household wealth and difficulties functioning. Participants were aged 50 years and above, as the majority of visual impairment is found in this age group.

Data was collected using a mobile application and statistics

analysed using Stata software. Results were adjusted for age and sex to account for the differences between the national population and the people who participated in the survey. Here is some information about the participants:

- 1,972 participants in Segou and 1,955 participants in Sikasso were examined.
- The mean age of participants was 63 years in Segou and 62.9 years in Sikasso.
- 55.6% of the participants in Segou and 56.9% in Sikasso were female.
- Compared to the national population of Mali, the study participants were relatively wealthier, with 49.8% in Segou and 67.6% in Sikasso belonging to the top two quintiles, and only 18.4% in Segou and 2% in Sikasso belonging to the bottom two.
- 12.6% of the participants in Segou and 11.9% in Sikasso had difficulties in at least one functional domain.

## Key messages

To achieve the ambitious universal health coverage (UHC) targets adopted by the World Health Assembly in 2021, Segou and Sikasso regions in Mali have to increase coverage of cataract surgeries and improve the quality of post-operative visual outcomes. To achieve this by 2030, the following is required:

- Train community and primary health care workers in primary eye care to improve access to patient-centred eye care services at community level.
- Strengthen the monitoring and supervision mechanisms of the National Eye Health Coordination to ensure the delivery of quality and inclusive eye health services.

- Improve equity of access among groups (including women, poorer people, and people with disabilities) by identifying strategies to reach them and to monitor their access to services.
- Identify and engage with organisations of people with disabilities (OPDs) and other civil society organisations in planning, implementation, and monitoring of eye health activities to improve access for people with disabilities.
- Engage with community and traditional leaders to improve knowledge about eye health, reduce use of harmful traditional practices, and improve take up of services from formal providers.

## More information

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## Rapid assessment of avoidable blindness in Segou and Sikasso regions, Mali

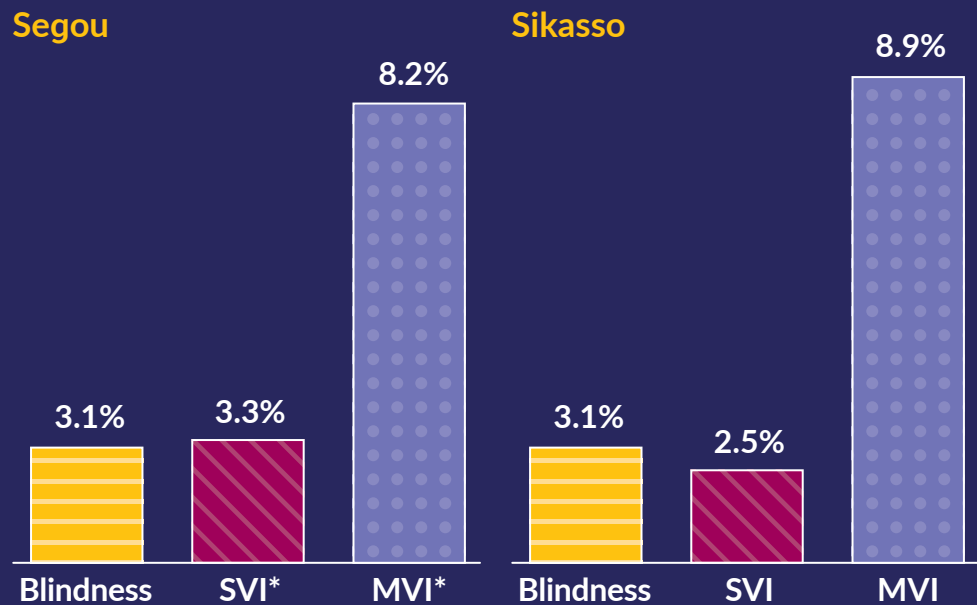
Rapid assessment of avoidable blindness (RAAB) is a standardised survey methodology designed to measure the magnitude and causes of visual impairment and the extent to which services are reaching different groups of people.



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## Key findings: Segou and Sikasso regions

The adjusted prevalence of blindness was **3.1 per cent** in both regions. The prevalence of severe visual impairment was **3.3 per cent** in Segou and **2.5 per cent** in Sikasso.



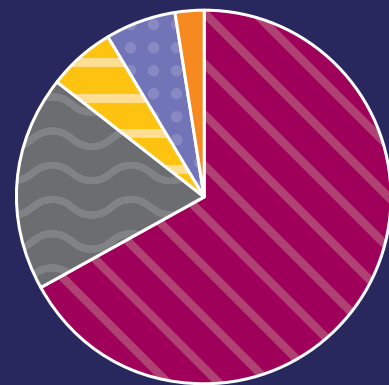
\* SVI - severe visual impairment, MVI - moderate visual impairment



Untreated cataract was the main cause of blindness and severe and moderate visual impairments both in Segou and Sikasso.

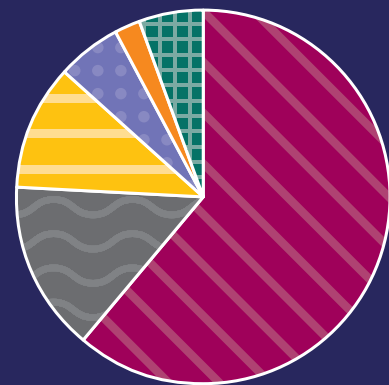
### Main causes of blindness in Segou

- Untreated cataract 67.1%
- Glaucoma 18.8%
- Other corneal opacities 5.9%
- Cataract surgical complications 5.9%
- Other (global/central nervous system abnormalities, uncorrected aphakia) 2.4%



### Main causes of blindness in Sikasso

- Untreated cataract 57.8%
- Glaucoma 16.9%
- Other corneal opacities 12%
- Other posterior segment diseases 4.8%
- Uncorrected refractive error 2.4%
- Other (central nervous system abnormalities, phthisis, trachoma corneal opacity, cataract surgical complications, uncorrected aphakia) 6%

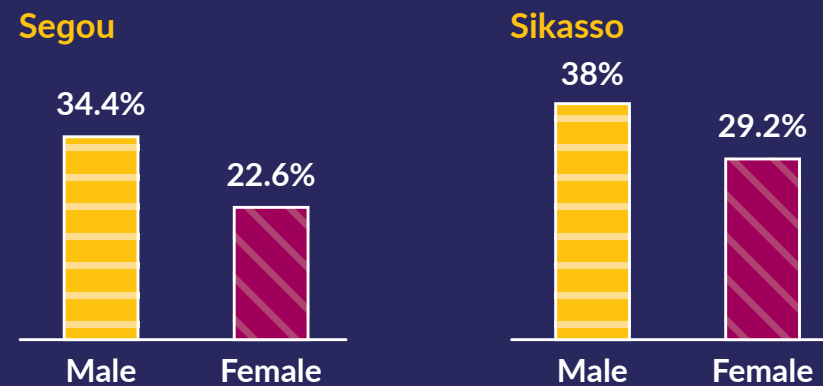


Uncorrected refractive error is responsible for **14.2 per cent** and **20.2 per cent** of moderate visual impairment respectively in Segou and Sikasso.

Using recently updated definitions of cataract surgical coverage (CSC), less than one third of people with cataract and visual acuity (VA) at 6/12 level had been operated on in both regions. In Segou, CSC was estimated at **27.2 per cent**. In Sikasso, CSC was estimated at **32.5 per cent**. In both regions, CSC was higher among males than females.

This means that both regions have low effective cataract surgical coverage (eCSC), that is, the number of people who have been operated and have a good outcome, expressed as a proportion of the total number of people in need of cataract surgery.

### Cataract surgical coverage in Segou and Sikasso regions



The quality of visual outcomes among operated eyes was low in both regions. In Segou, **45.4 per cent** of operated eyes had good post-operative vision at VA<6/12. In Sikasso, **36 per cent** of operated eyes had good post-operative vision at VA<6/12.

### Effective cataract surgical coverage in Segou and Sikasso regions

