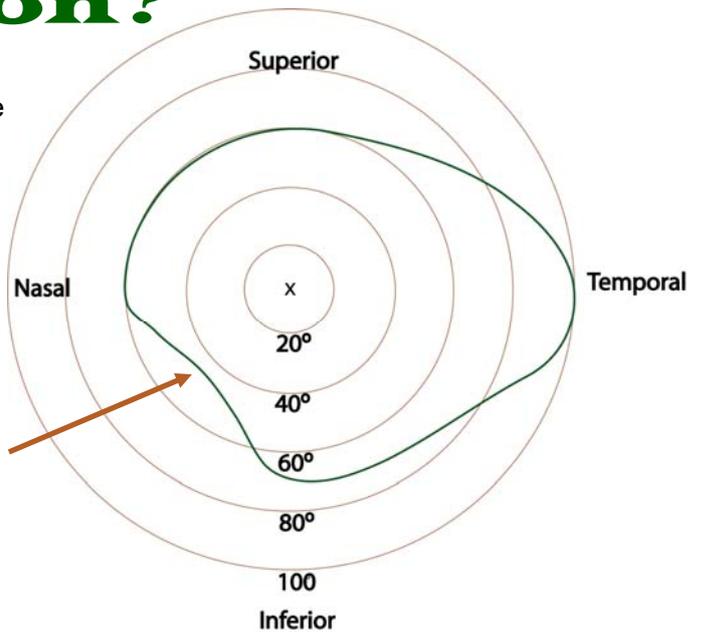


How wide is your vision?

“Visual fields” is the clinical term used to describe the extent of our peripheral vision.

Visual fields are measured relative to where our eye is looking, or our fixation point. On this diagram it is marked with an “x”.

The approximate dimensions of the human visual field for one eye is 60° nasally, 60° superiorly, 100° temporally and 75° inferiorly.



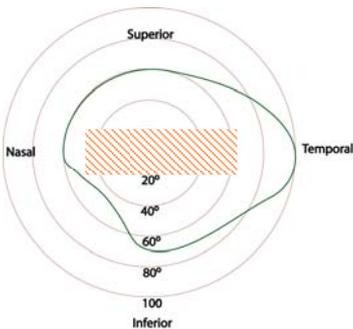
What happened here?

Our nose obscures part of our visual field.

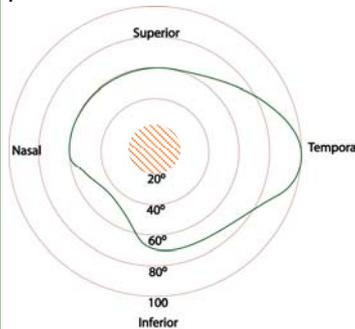
If we had no nose, then the visual field on the nasal side would be the same shape and size as it is on the temporal side.

Did you know?

To hold a private vehicle drivers licence in Australia, you require a visual field that extends at least 110° horizontally and 20° vertically across the fixation point¹. This corresponds approximately to the shaded area:



In Australia, legal blindness is defined as a visual field less than 20° diameter, centred across the fixation point²:



Colloquially this is called “tunnel vision”, and people may compensate for it by using more eye and head movements to scan their environment.

Virtual reality devices provide less field of view than our eyes. Lynn and co-authors³ measured the horizontal field of view of 20 virtual reality headset / smartphone pairings.

The field of view ranged from 39.6° (Samsung S7 paired with a VR Box) to 55° (HTC Vive).



Spectacle frames with wide temples (sides) can obscure your peripheral vision, much the same as “blinkers” do on a horse⁴.



Narrow temples and temples with transparent (clear or tinted) inserts are less likely to be problematic.

TIP: Try on spectacle frames or sunglasses before you purchase them to check that your peripheral vision is not blocked by the temples.

References:

1. Austroads Assessing Fitness to Drive 2017
2. <https://www.visionaustralia.org/information/newly-diagnosed/blindness-and-vision-loss>
3. Optometry Vision Science (2020) 97(8): 573-582.
4. Optometry Vision Science (2013) 90(12): 1450-1455



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