

## Frequency of Albinism / Rates of Occurrence

## North America, Europe, Africa and Tanzania\*

While numbers vary widely and no comprehensive studies have been conducted, it is reported that in North America and Europe, an estimate of 1 in every 17,000 to 20,000 people have albinism.<sup>1</sup>

In Africa it is estimated that 1 in every 5,000 to 15,000 people have albinism with selected populations having estimates as high as 1 in 1,000.<sup>2</sup> In Tanzania where UTSS is based, the prevalence of albinism is estimated to be 1 in 1,400 and 1 in 19 carry the gene.<sup>3</sup>This means that there are over 33,000 persons with albinism<sup>4</sup> in Tanzania, with a rate of more than 14 times that of North America & Europe.

<sup>2</sup> See Preliminary Report of the United Nations High Commissioner for Human Rights, Persons with Albinism, 12 September 2013 ["UN Preliminary Report"] at para 14, available at

http://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session24/Documents/A HRC 24 57 ENG.doc, citing Esther S. Hong, Hajo Zabeed, Michael H. Repacholi, "Albinism in Africa as public health issue", *BMC Public Health*, vol. 6, No. 212 (August 2006). Available from www.biomedcentral.com/1471-2458/6/212.

<sup>3</sup> 1 in 1,400 data is from Luande J, Henschkle CI, Mohammed N: **The Tanzanian human albino skin**. *Cancer* 1985, **55**(8):1823-1828. Note however that this study advises that this is "A study of individuals with albinism who were registered in the Tanzania Tumour Centre in Dar-es-Salaam estimated a prevalence of 1 in 1,400. this *estimation is difficult to extrapolate to the entire population*, given the data's limitation only to those individuals enrolled in the registry." *Regarding this paper, American Geneticist Dr. Murray Brilliant says*: "I don't think it has been done in a rigorous fashion and so I would take this as an estimate. There are no other (independent) studies where the incidence has been reported. My estimates were for carrier frequency and were consistent with a 1 in 1,400 occurrence. (**NOTE**: Dr. Brilliants DNA testing revealed that 1 in 19 Tanzanians carry the gene for albinism.). A world renowned geneticist specializing in albinism: <u>BRILLIANT.MURRAY@mcrf.mfldclin.edu</u><sup>4</sup> This is based on a national population of 47.78 million (World Bank data 2012).

\*We presume the "albinism" that was measured in all cases include mostly oculocutaneous albinism which is the most visible form of albinism affecting all of the hair, skin and eyes.

<sup>&</sup>lt;sup>1</sup> The US' National Institute of Health in 2007 cited 1 in 20,000 as the frequency of oculocutaneous albinism worldwide, <u>http://ghr.nlm.nih.gov/condition/oculocutaneous-albinism.</u>

See for example, Vision for Tomorrow, <u>http://www.visionfortomorrow.org/albinism/</u> NOAH, a national group serving persons with albinism in the USA report the frequency to be 1 in 17,000 in USA, see <u>http://albinism.org/publications/what is albinism.html</u>

More recently, groups serving persons with albinism report it to be 1 in 17,000.