Table 2.2 Percentage of people with different types of colour vision reporting difficulties with everyday tasks (from Steward and Cole, 1989)

Activity	Dichromats	Anomalous trichromats	Normal
Selecting clothes, cosmetics etc.	86	66	0
Distinguishing the colours of wires, paints etc.	68	23	0
Identifying plants and flowers	57	18	0
Determining when fruits and vegetables are ripe, by colour	41	22	0
Determining when meat is cooked, by colour	35	17	0
Difficulties in participating or watching sports, because of colour	32	18	0
Adjusting the colour balance of a television satisfactorily	27	18	2
Recognising skin conditions such as a rash or sunburn	27	11	0
Taking the wrong medication because of difficulties with colour	0	3	0

2.8.2 Low vision

As the visual system ages, the ability to focus close up is diminished, the amount of light reaching the retina is reduced, more of the light reaching the retina is scattered, the spectrum of the light reaching the retina is changed and more straylight is generated inside the eye. These changes start in early adulthood and continue at a steady rate with increasing age. The consequences of these changes with age for the capabilities of the visual system are many and varied. At the threshold level, old age is characterised by reduced absolute sensitivity to light, reduced visual acuity, increased contrast threshold, reduced colour discrimination and greater sensitivity to glare. In practice, the elderly have difficulty seeing in dim light, moving from bright to dark conditions suddenly, reading small print and distinguishing dark colours.

With increasing age comes a greater likelihood of pathological changes leading to low vision and eventual blindness. The World Health organisation (WHO) defines classes of vision based on visual acuity and visual field size (Table 2.3).