EFFECTS OF ELECTRIC SHOCK

The following table indicates the approximate effects of various degrees of electric shock on a normally healthy person.

Current (mA)	Effect
0.9 – 1.2	Current just perceptible
1.2 – 1.6	Tickling sensation in the hands
1.6 – 2.2	Sensation that the hands have gone to sleep
2.2 – 2.8	Sensation now moved up to wrist
2.8 – 3.5	Slight stiffening of the hand
3.5 – 4.5	Considerable stiffening of lower arm muscles
4.5 - 5.0	Feeling of cramp in the lower arm and slight trembling of the hands
5.0 – 9.0	Unpleasant cramping of the lower arm, limits of ability to “let go” are reached
15 – 20	Release is impossible, this cannot be tolerated for more than 15 minutes
20 – 40	Serious and very painful contraction of the muscles, breathing stops but normally resumes if current is interrupted
50 – 100	Ventricular fibrillation, (a state of the heart which leads directly to death)
100 – 200	Serious burns and muscular contraction of such a degree that the thoracic muscles constrict the heart thus inhibiting its action during the shock (no ventricular fibrillation)

At very high voltages the person may be thrown clear of the contact by the violence of the muscular contraction thus avoiding serious injury.

At lower voltage levels, however, the contractions will be less severe, therefore, contact be maintained for a longer duration and the shock may prove fatal.