

Effects of Electric Current in the Human Body

Notes:

- 1,000 milliamperes = 1 amp
- 15,000 milliamperes = 15 amp circuit
- As a point of reference, a common household circuit breaker is usually 15, 20 or 30 amps

Current	Reaction
Below 1 milliampere	<ul style="list-style-type: none">• Generally not perceptible
1 milliampere	<ul style="list-style-type: none">• Faint tingle
5 milliamperes	<ul style="list-style-type: none">• Slight shock (not painful, but disturbing)• Average person can let go• Strong involuntary reactions can lead to other injuries
6-25 milliamperes (women)	<ul style="list-style-type: none">• Painful shock• Loss of muscular control
9-30 milliamperes (men)	<ul style="list-style-type: none">• Cannot let go but can be thrown from circuit if extensor muscles are stimulated
50-150 milliamperes	<ul style="list-style-type: none">• Extreme pain• Respiratory arrest• Severe muscle contractions• Death is possible
1,000-4,300 milliamperes	<ul style="list-style-type: none">• Heart stops• Muscle contractions• Nerve damage• Death is likely
10,000 milliamperes	<ul style="list-style-type: none">• Cardiac arrest• Severe burns• Death is probable