ARC FLASH STATISTICS

An arc flash occurs when an electric current passes through air between conductors, from a conductor to ground instead of its intended path.

THE ARC ACROSS AN AIR GAP CAN RESULT IN TEMPERATURES AS HIGH AS

35,000 DEGREES FAHRENHEIT, 4X HOTTER THAN THE SURFACE OF THE SUN.









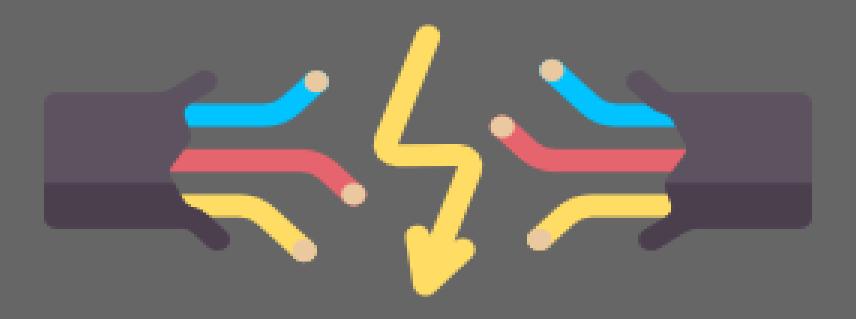
7,000

Burn injuries, as a result of arc flash incidents, occur each year.

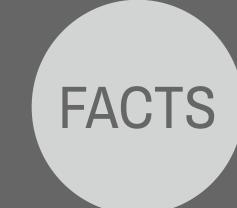
Arc flashes can cause forces greater than

2,000

pounds per square foot.



30,000 EACH YEAR



5-10 PER DAY (US)

HOW OFTEN DO THEY OCCUR?

Despite the preventative measures available, approximately 30,000 arc flash incidents occur every year. According to a 2007 study, 5 to 10 arc flashes occur every day in the United States. Nearly all of these result in injuries, and sometimes, fatalities.

CALCULATING THE COSTS



80%

1-2 ARC FLASH
RELATED DEATHS
OCCUR EVERY
DAY.

OF FATALITIES
ARE A RESULT OF
BURNS, NOT
SHOCK.



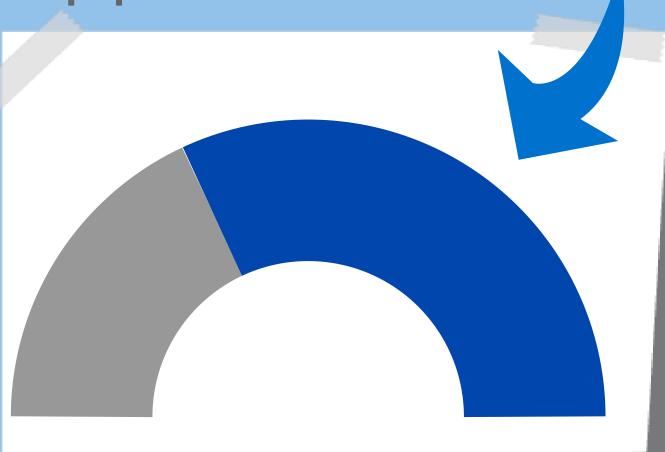
PROPER USE OF PPE COULD HAVE PREVENTED 39% OF ELECTRICAL BURN INJURIES IN 2010.



AVERAGE
LITIGATION COST
TO A COMPANY
AFTER AN ARC
FLASH INCIDENT
IS \$10 - \$15 MILLION.

CAUSES

TWO-THIRDS of all arc flash incidents are caused by worker error, mainly by the worker failing to de-energize the equipment.



Electrical systems with operating voltages over 120V are susceptible to arc flash incidents.

Even small errors can produce arc flash occurrences.

73%

Of arc flash occurrences were recorded in facilities listed as "average" or "good" in 2007.

WITH THE 2017
NEC, ARC FLASH
PROTECTION
REQUIREMENTS &
ASSESSMENTS ARE
BECOMING
STANDARDIZED
THROUGHOUT THE
COUNTRY.

Source: "OSHA Statistics About Arc Flashes." Technical Skills Development, Vista College.

