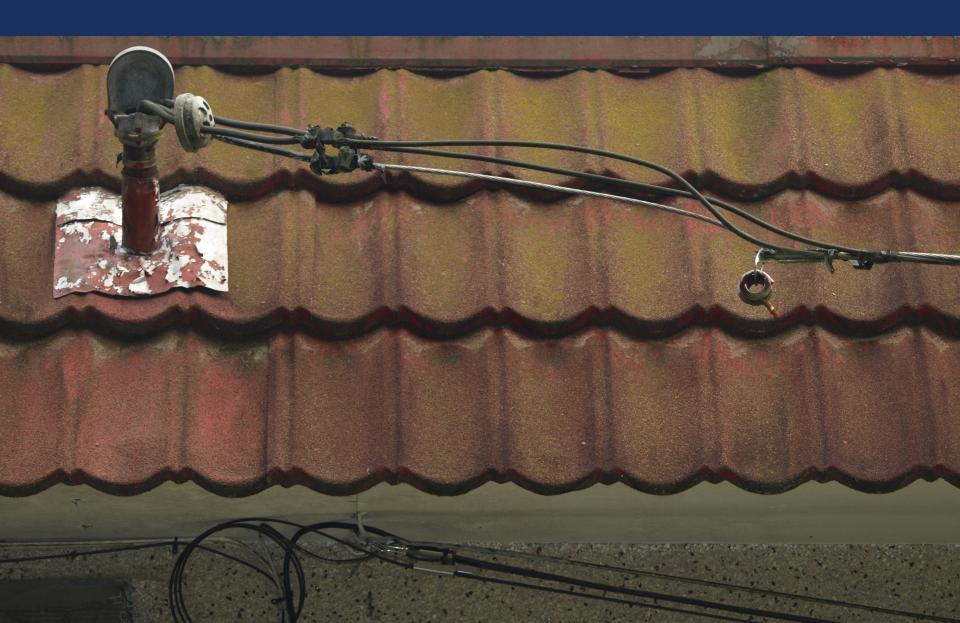
ELECTRICAL FIRE RISKS IN OLDER HOMES

Talk 1: Old Services, Panels and Circuit Breakers









A well kept 1930s home, service upgraded in the 1960s to 100 amps...





... but deterioration can go unnoticed



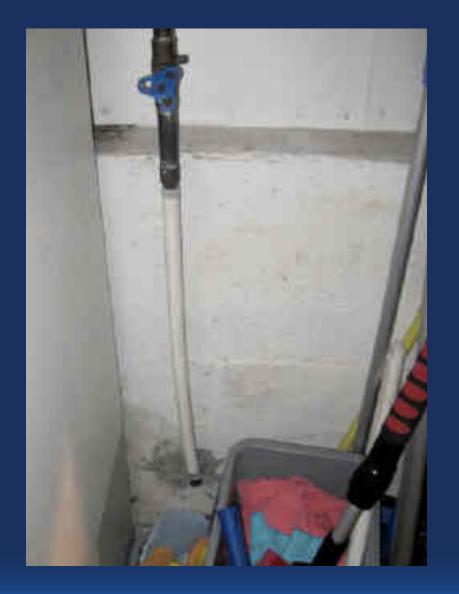


Extreme Risk

Due to age & exposure to weather

Rare occurrence but extremely dangerous



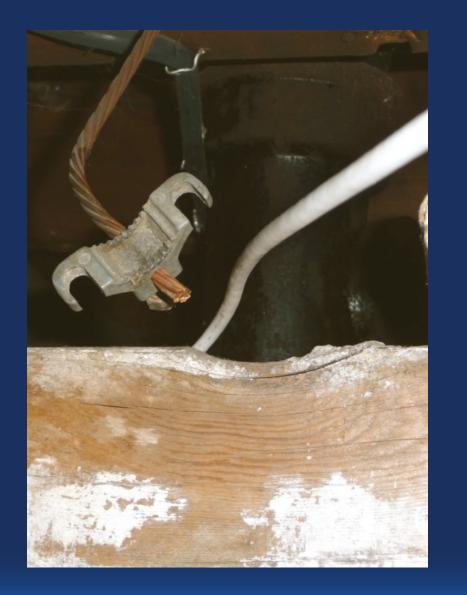


House is not grounded due to plumbing repairs:

In pre-1960s houses the copper water pipe provided the grounding.

In 10% of houses the grounding is broken





House not grounded due to deterioration





Illegal panel install

100 amp panel on 60 amp service





Illegal panel install

60 amp conductors

200 amp circuit breaker

In houses built pre 1972 we see an illegal panel install in more than 10% of houses





Circuit breakers oversized

In houses pre 1975 we see one or more circuit breakers oversized in 20% of houses









Circuit breakers have exceeded expected service life

In houses built pre 1975 we see circuit breakers are broken, expired or with loose connections in more than half the houses



SUMMARY Key causes of electrical fires in old houses are due to:

- 1. Age
- 2. Deterioration
- 3. DIY work
- 4. Lack of maintenance

What is the main indicator for HIGH Risk homes?

Age of house

