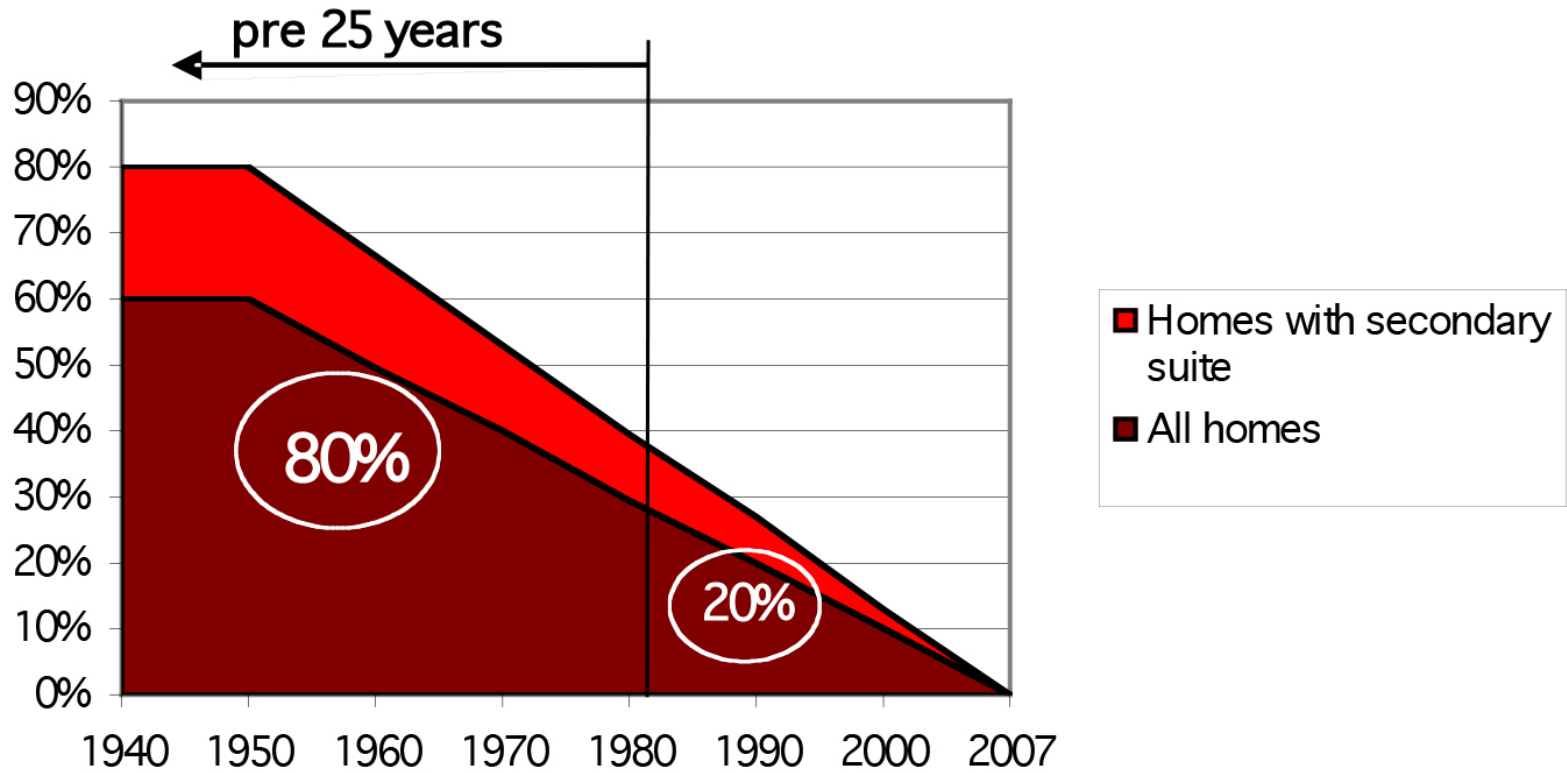


ELECTRICAL FIRE RISKS IN OLDER HOMES

Houses built Pre-1960



Homes with dangerous wiring



Key causes of electrical fires in houses built pre-1960

- Lack of maintenance/ deterioration
- DIY Work
- Faulty equipment without ground protection
- Occupant actions



Lack of Maintenance

Build up of debris is due to age and openings.

No sparks, no fire.

In literally every house we see built pre-1960 there is a build up of debris in the electrical boxes!



DIY Work

In literally every house built pre-1960 we find hazardous Do-It-Yourself (DIY) work present.

As such, for every report we are writing, the house is rated **“High Risk”**.

DIY Work

In almost every house with DIY work we find open knock-outs.

Open knock-outs attract spiders and debris.



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DIY Light Installation

Connections loose & not in a junction box.

In 30% of houses we find lights hazardously installed.



DIY installed baseboard heater

Cable without box
connectors can lead to fire.

In 10% of houses
baseboard heaters are
hazardously installed or are
in hazardous locations.



DIY Garage Feeder

In 20% of houses
garage feeders are
hazardous.

Ungrounded wiring

In almost every house we see built pre-1960 ungrounded wiring is present:

- “Knob and tube” in houses pre-1950
- “Ungrounded cable” in houses 1950 to as late as 1962

In every house we find the original outlets swapped for modern 3-prong.

Not safe, as no ground protection of modern equipment.



Knob & tube (pre-1950)



**Ungrounded cable, NMD-1
(1950 - 1962)**



Knob & tube solution

In nearly all houses the knob-and-tube wiring is in fine shape, not requiring replacement.

Fortunately there is an excellent and inexpensive solution, providing ground-fault protection of modern equipment:

GFCI protection of the outlets!

A concern with cloth-jacket (older style) NMD cables





Occupant actions can also be dangerous!

Extension cord stapled to wall/
overloaded/ through walls/
under rugs.

Found in 30% of houses
built pre-1960.

SUMMARY

Key causes of electrical fires:

1. Deterioration due to age
2. DIY work
3. Faulty equipment without ground protection
4. Occupant actions

What is the main indicator for HIGH Risk homes?

Age of house

