

# Research raises concerns over smoke detectors' effectiveness in waking children

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(Medical Xpress)—Standard domestic smoke detectors may not always wake children in the event of a fire, according to research by the University of Strathclyde's Centre for Forensic Science and Derbyshire Fire & Rescue Service.

The study of 34 [children](#) -20 girls and 14 boys- aged between two and 13, found that 80% slept through smoke detector alarms. Each child was tested six times and only seven of the children woke during any of the tests.

Only two children woke on every occasion and none of the 14 boys in the research woke at all.

While the findings do not call into question the value of smoke alarms in alerting people to fires, nor their capacity to help save lives, the fact that the children failed so often to wake up on the activation of the alarms does raise concerns.

Professor Niamh Nic Daeid, of Strathclyde's Centre for Forensic Science, who led the research said 'While the results of this study remain preliminary given the number of children involved, they do highlight concerns that cannot be ignored about the effectiveness of smoke detectors in waking children'.

"Further research is required to build on the findings to date and investigate robust solutions to the issues highlighted."

Dave Coss, East Midlands Regional Fire Investigation Dog Handler and Watch Manager with Derbyshire Fire & Rescue Service, conducted the study as part of his Masters degree taken at the University of Strathclyde.

Derbyshire Fire & Rescue Service reinforces the importance of having a working smoke alarm on every level of the home and that the research finding emphasise the importance of having a pre-planned and practised escape route or plan that everyone in the home, whether a family member or overnight guest, is aware of. This plan must account for waking, alerting and evacuating all children in the home.

The Service also continues to campaign and work towards domestic sprinklers being fitted into all new domestic dwellings and retrofitted into the homes of those most vulnerable to [fire](#), as and where appropriate.

Provided by University of Strathclyde, Glasgow

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