



THE NEW ZEALAND SAFETY COUNCIL SMOKE ALARM REPORT

The New Zealand Safety Council's position is that
Ionisation Smoke Alarms be **BANNED FROM SALE** in New Zealand

Prepared and written by David Calvert, with information from Adrian Butler, The World Fire Safety Foundation [WFSF] Chairman and all colleagues campaigning to remove ionization alarms from homes around the world (names listed at the end of this special Report).

In Memory of Freda Birch

Freda Birch, a 91 year old lady, died last month in Papakura, [4 kms from the Safety Council's office] in a small pensioner unit, from smoldering fire, so I was able to go and investigate what occurred and interview the immediate neighbour. The fire started from a twenty eight year old refrigerator electrical fault that smoldered for several hours, before exploding and blowing out all windows and the garage door.

Nobody should die in such circumstances and with correctly fitted photo-electric alarms they would not, as the alarm would quickly sense the smoke and sound a warning. The New Zealand Safety Council [NZSC] has been campaigning for five years now to get ionisation alarms removed from the market. **see details below.**

Three IONISATION ALARMS (ions) were fitted in Freda's unit previously by the Fire Service [who stated: "that she had working ion smoke alarms" in a press release] and of course they did not work! The Fire Service said it was a tragedy that she was overcome by smoke! They have now re-fitted all adjacent pensioner units with new IONISATION ALARMS see images below.



**NZ Fire Service caught red-handed!
Still fitting IONS**



Freda Birch's burnt out unit

The recently fitted new alarms have no brand name but are made in China with 'el cheapo' batteries! Already the one pictured in neighbouring unit was beeping, so the battery may already be suspect after being fitted for one day.

We strongly recommend photo-electric smoke alarms fitted with five year lithium batteries.

Freda should still be alive to continue enjoying her retirement with her close friend and neighbour, Reen Ruddle. That she is not is because the wrong type of alarm was fitted to her unit. Ionization alarms do not detect smoldering smoke and should not have been fitted. In May 2006 the New Zealand Fire Service [NZFS], after defending the reliability of ionizing alarms against all the evidence supplied by both The World Fire Safety Foundation [WFSF] and the NZSC, agreed to adopt the Australasian Fire Authorities Council's (AFAC) findings to recommend ONLY photo-electric alarms. [See below](#)

The New Zealand Safety Council, who are members of the WFSF, also met with NZFS. All extensive evidence supplied, including the award winning film 'Silent Alarms', was rejected. Despite TVNZ airing stories in May 2006 and Jan 2007 about the serious problem with ionization alarms, the NZFS still refuse to act on the evidence.

The NZFS website stated it is still policy to fit ionization alarms as "photo electric alarms are too expensive!" **They are in fact mostly the same price now in NZ.**

Tragically the New Zealand Fire Service has not complied with the Australasian Fire Authorities Council's official position despite the NZFS's May 2006 claim, "We will adopt the [AFAC] findings as soon as they are available." [See below](#)

This shows a lack of leadership and a desire to stick with the failed status quo. The WFSF has evidence that proves that ionization alarms do not activate in Australian Government testing until twice the maximum safe limit required for photoelectric alarms ~ a level of smoke which has been described by Mr David Isaac, Standards Australia Fire Detection committee member, as **"Dangerously High, Totally Unacceptable."**

We sent all our evidence to NZ Consumers Institute requesting that they test a selection of alarms to prove our contention that ionization alarms do not safely detect smoke from smouldering fires.

NZ Consumer appeared on TVNZ in May 2006, with visual evidence showing ionization alarms failing to detect smoke from smouldering fires in scientific testing conducted by the Building Research Association of New Zealand.

Ionization alarms are 'fire [not smoke] detection devices' says leading campaigner USA~Boston Fire Chief, Jay Fleming.

Ionizing alarms will allow deadly smoldering smoke to fill your house whilst you sleep blissfully on, breathing in toxic gases such as carbon monoxide and hydrogen cyanide...

OFTEN WITH FATAL CONSEQUENCES

The Australasian Fire Authorities Council [AFAC] is the peak representative body of all New Zealand and Australian Fire Brigades. On June 1st 2006 AFAC released an official Position Statement. Clause 3.0 states:

"THAT ALL RESIDENTIAL ACCOMMODATION BE FITTED WITH PHOTO-ELECTRIC SMOKE ALARMS"

Why is the NZ Fire Service failing to comply with this vital change of policy?

In November 2007 NZFS called for tenders for 50,000 ionization alarms. The one I saw may have been one of them. The New Zealand Fire Service senior management must be held accountable. The truth will come out, but how many more people will die or be injured unnecessarily before we get a revamped NZ Standard in line with Australian commercial building standard AS1670.1 (April, 2004) and the amended Australian Standard 3786, both mandating photo-electric technology.



Our Advice:

Make sure your family and home are protected by replacing your old ionization alarms (whether battery or hard-wired) with photo-electric alarms.



**A Message from: Adrian Butler
The World Fire Safety Foundation Chairman
Former full-time New Zealand Fire-Fighter**

The truth about ionization smoke alarms has been kept from both the public and fire-fighters for over thirty years.

Hard to believe? ~ Fire-Fighters and the public tell us.....

* "But my smoke alarms go off when we burn the toast!"

* "But they have been passed by the various Standard approving bodies!"

Have we been misled? Yes, absolutely. Unfortunately some of those offering 'solutions' are the very ones who have kept us in the dark. But now the truth is coming out, can those who have hidden it from us be objective? Discover the facts and decide for yourself.

Standards Australia is committed to mandating photoelectric smoke alarms in all homes with the amended/corrected AS3786 which rectifies the flawed testing of ionization alarms in AS2362.17 (the Australian sensitivity test Standard). Standards Australia's work has been underpinned by three USA States having now passed legislation to mandate photoelectric alarms in all new homes and the fact that the landmark US lawsuit, Hackert v BRK is now settled.

BRK, the worlds largest smoke alarm manufacturer was fined punitive damages after Federal Court judges ruled that the failure of the ionization detector was declared to be a "legal cause of death" of Christine and William Hackert.



For more information visit us at:

www.TheWorldFireSafetyFoundation.org

Spend a few minutes listening to New Zealander David Isaac talking about the problems with ionization alarms.

David is a Fire Safety Professional living in Australia and a member of the Australian Standards Committee that prepared the amended Smoke Alarm Standard, AS 3786. In the amended Standard Ionization alarms will be required to pass the same obscuration

(visible smoke) test as photoelectric smoke alarms. Existing test data shows ionization alarms are unable to pass the obscuration test. This will effectively mandate photoelectric alarms in all homes. Tragically AS 3786's implementation is being held up by politics.

NEWSFLASH ~ New Vermont Legislation [USA]

Governor Douglas has signed legislation mandating photoelectric alarms in all new Vermont homes from 1 Jan, 2009. Barre City Fire Fighters say of all the fatal fires of the past decade, a third of smoke detectors did not go off in time to warn people to get out.

Find out how the fire that killed four children and their mother inspired Barre City Fire Fighters to investigate ionization alarms which led to legislation to eliminate them from new Vermont homes.

Visit the 'FireFighters' page at: www.TheWorldFireSafetyFoundation.org

BRK - First Alert Fined Punitive Damages Appeal Fails - Hackert vs BRK Inc and First Alert Inc.

After Shelia Hackert's husband and daughter died in a house fire, she sued BRK/First Alert, the world's largest smoke alarm manufacturer. Shelia won and was awarded compensatory and punitive damages. BRK/First Alert appealed. What did the US Federal Appeal Court judges have to say after overruling BRK/First Alert's appeal?

"...Our review of the record reveals sufficient evidence to support the jury's determinations,

1. that the smoke detector was defectively designed under New York law;
2. that Defendants-Appellants were negligent with respect to the smoke detector;
3. that the smoke detector's failure was **a legal cause of the deaths of William and Christine Hackert**; and
4. that an award of **punitive damages** was appropriate."



June 2008: BOSTON ~ US Senator John Kerry [2004 Presidential candidate] Pushes US Consumer Product Safety Commission to Answer for Unsafe Ionization Smoke Detectors

Senator Kerry asked:

"If [ionization] smoke detectors are now proven to be ineffective why are they still being sold? ... Americans are using inadequate and unsafe smoke detectors..."

Senator Kerry has written to the head of the Consumer Product Safety Commission (CPSC), urging her to answer for smoke detectors that have continuously proven to be unsafe. Kerry's letter is a follow up to a letter sent by Deputy Chief Joseph Fleming of the Boston Fire Department, who raised the issue with the CPSC earlier this year. Boston Fire Chief Fleming drew attention to safety issues surrounding ionization smoke detectors and asked the CPSC to investigate.

The CPSC, which had expressed concerns about the detectors **as early as 1995**, has failed to investigate or to even respond to Chief Fleming's concerns. "This should be a no-brainer. If smoke detectors are proven to be ineffective, why are they still being used"?

Chief Fleming rightly raised this question earlier this year. I strongly urge the CPSC to immediately provide answers to his concerns as well as to consider the potential loss of life when Americans are using inadequate and unsafe smoke detectors," **said Senator Kerry.**

Massachusetts Fire and Building Codes to Eliminate Ionization Smoke Alarms!

Fire Chief Jay Fleming, Boston Fire Department, WBZ TV, Boston, Dec 6, 2007

"Nationally the percentage of people dying when the [ionization] smoke detector works, but works too late, is approximately 40%.

I think it is responsible for as many as **10,000* deaths since 1990.**"

Approx' 75% of deaths occurred when 'working' ionization alarms failed to give sufficient warning, the balance (25%) occurred when ionization alarms were present but batteries had been removed, primarily due to excessive false alarms.

**Boston's WBZ I-Team's six month investigation vindicates
Chief Fleming's seventeen year campaign.**

From our website in 2003

After 26 years as a Safety Professional dealing with workplace emergency response systems, I thought I had my own house protected effectively with ionization smoke detectors.

In late 2003 I met Adrian Butler, who arrived at the New Zealand Safety Council's offices with a story to tell about ionization smoke detectors. I had already experienced several failures with the ionization type detectors and did not have a lot of faith in them from a quality viewpoint.

One had gone off in the middle of the night (a false alarm) and I had to remove the battery to stop the noise. My wife, who was asleep 8 metres away, did not wake up and this set me thinking about how loud the alarm needed to be.

I have never personally experienced a house fire and like most safety people, regularly tested the detectors, kept note of the date and changed batteries annually.

In the event of a fire I thought I would be warned. After all, that is what the advertising says and ionization smoke detectors are sold throughout the world and recommended by fire services.

Adrian showed me evidence of a consistent failure of ionising detectors to detect slow smouldering fires, often with tragic consequences. He also gave me some photoelectric smoke detectors to try out. One of these tragedies had struck the Zonneveld family in February 2003, in Waihi NZ, when Colin Zonneveld lost five family members in a house fire, including his wife. Colin had working ionization alarms fitted that did not work! I later met Colin in Tasmania to hear his horrific experience first hand. [see below]

Adrian also gave me a book "[The American Home is a Firetrap](#)" written by Richard Patton, an American Fire Engineer. I read Richard's book and commenced research on the web. I wanted to prove, or disprove, what I had been told.

Subsequently I called two fire engineers in the United Kingdom who told me that ionization detectors are no longer allowed in commercial buildings in the UK.

This was confirmed by two detector suppliers who on their website, recommend Photoelectric detectors for all commercial buildings. I also discovered that Australian Standard 1670.1 states that "[Photoelectric detectors shall be installed in all sleeping areas and paths of egress \(for commercial buildings\)](#)", confirming the UK requirement. All my research confirmed what I had been told, IONS are fire detectors not smoke detectors.

Time moved on and another family tragedy occurred, this time in Scotchtown, Tasmania, killing 4 children, 2 members of the Cohen family and two of their friend's children. See pictures below. Again a smouldering fire had struck with devastating consequences. In September 2004 members of [The World Fire Safety Foundation \[WFSF\]](#) visited Scotchtown Tasmania to investigate what had occurred and to meet Mr & Mrs Cohen, hearing their harrowing stories first hand.

Whilst in Tasmania I got the chance to meet Fire Safety Guru, Richard Patton and listened to his experiences in his attempts to improve home fire safety in the USA over the last 30 years.

It was decided to launch the campaign to: 'Stop The Children Burning' together with the film of the same name. This event was also covered by Australian Channel Nine program, 'A Current Affair'.

Death of Four Children

Remember every human tragedy has real people behind the headline. In Tasmania, these four lovely Kids died [needlessly] when their families working ionization alarms failed to activate!



Conclusion

This summary report is the result of the above experiences and the information shared with the members of the World Fire Safety Foundation. Behind this Report is a vast amount of research material and experiences which are available on linked websites.

There has also been outstanding input from individual firefighters such as leading campaigner USA~Boston Fire Chief, Jay Fleming and the members of the Barre City Fire Brigade*.

**Barre City Fire Fighters investigated ionization smoke alarms which has led to legislation to eliminate them from new Vermont homes.*

We need to further share our simple message with everyone, all your family, friends and work colleagues.

All members of Parliament have been sent this report asking for action.

I would encourage you all to join with the New Zealand Safety Council in supporting the WFSF to rid our homes of ionizing smoke detectors and replace them with photoelectric alarms. Even better if you can hard wire the detectors and inter-connect them so that if one goes off they will all sound an alarm. A further improvement is the combined photoelectric/heat detector type alarms which are now coming onto the market.

We will be contacting the Commerce Commission shortly to ask for a Ban on the Sale of Ionization Alarms. See our website for more information on Home Fire Safety.



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Thank You for reading our Smoke Alarm Report.

Please pass it on to your family, friends and colleagues. If you have an opinion on any matter raised send us an email, we will include a summary of comments when we go to the Commerce Commission asking for a ban.

Corporate Supporters



We thank World Fire Safety Foundation members and supporters:

Adrian Butler, Karl Westwell, Tony Stroud, Lucy Stroud, Richard Patton, Fire Chief Jay Fleming, All NZSC Registered Safety Professionals, Paul Gutch, Paul Hobin, Barre City Fire Department, Tony Johnson and many other NZSC members and supporters.

The New Zealand Safety Council is critical of the Leadership of the New Zealand Fire Service in failing to properly promote photo-electric alarms in accordance with AFAC's official position. However we acknowledge our admiration for the dedication and courage of all rank-and-file Firefighters, in their daily work with other Emergency Services to protect New Zealanders and rescue them in adverse conditions. The views in this Newsletter are those of the NZSC Executive Director & Trustees and are supported by many others.