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# volunteer fire fighter

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Why are the Public, Fire Fighters and Fire Industry Personnel STILL Not Being Told the Truth about Smoke Alarms?



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# Why are the Public, Fire Fighters and Fire Industry Personnel STILL Not Being Told the Truth about Smoke Alarms?

# THE IONIZATION SMOKE ALARM MYTH

U.S. authorities claim a nearly 50% reduction in home fire deaths due to smoke alarms and hail them as "the greatest success story in fire safety in the last part of the 20<sup>th</sup> century." But is this true?

#### **MYTH BUSTED**

In the mid-70's less than 15% of homes had smoke alarms and for every 1,000 home fires there were **8** fire deaths.

In 2005, thirty years later, 95% of homes had smoke alarms and for every 1,000 home fires there are STILL **8** fire deaths.

Today with over 95% of homes having smoke alarms, there are just as many fire deaths per 1,000 home fires as there were when only 15% of homes had smoke alarms.

Evidence shows we now have half the fire deaths because the number of home fires has dropped in half (due to less cooking, less smoking, safer electrical appliances, flame retardants materials etc).

So why is the ionization alarm (the type in almost every home) hailed as such a success when the number of deaths per thousand home fires has not changed?

On 01 June, 2006 AFAC warned:

"lonization smoke alarms may not operate in time to alert occupants early enough to escape from smouldering fires."

So why, over four years later, is the public STILL being kept in the dark?

he Australasian Fire and Emergency Service Authorities

Council (AFAC) is the peak body for all Australian and New Zealand Fire Brigades.

AFAC released their landmark Position on Smoke Alarms in Residential Accommodation document on 01 June, 2006.

#### THE PROBLEM

In their official position statement AFAC warns that "Ionization smoke alarms may not operate in time to alert occupants early enough to escape from smouldering fires."

That's a very serious statement. Especially when one considers that in over 70% of fire deaths the victims died from smoke

inhalation before the flames reached them.

So, after in-depth research, AFAC states that the ionization type of smoke alarm, the type of alarm found in almost every Australasian home, may not alarm early enough in the type of fire most likely to kill.

#### THE DECEPTION

Think about it, this is a device you buy to do one thing and one thing only - detect smoke. Yet it frequently fails to do that, so frequently in fact that evidence held by the CSIRO shows it may fail to warn you when you need it most.

THE BIG LIES: #1

"But I'm OK, my Alarm goes off when I Burn the Toast."



New Zealand Fire Service Brochure Promoting Photoelectric Smoke Alarms

#### TRUTH BE TOLD

Although hit and miss, across the ditch in New Zealand the Fire Service has at least made a start.

The toe tag on this two-page advertisement reads: "When you're asleep you'll never notice the deadly poisonous smoke that silently suffocates you. Unless you have a working photoelectric smoke alarm."

Tragically almost everyone thinks they're OK because when you cook toast, or open the door to a hot oven, your smoke alarm may sound. So, surely you must be OK, right?

Wrong! One of the worst things about ionization smoke alarms is they lull people into a false sense of security.

#### Cry "Wolf!"

The ionization smoke alarm is like the little boy in the children's story who cried wolf. They false alarm so frequently that studies show that 20%-30% of us either disable the alarm, remove the battery or choose not to replace the battery when flat.

And as if that's not bad enough, it gets even worse. Because just like the

villagers in the story about the boy who cried wolf, when we are subjected to so many false alarms, we too become complacent.

#### TIME IS RUNNING OUT

The alarm goes off at night, you get an elbow in the ribs from your partner telling you it's your job to check why the alarm is going off again.

This problem is so bad that a Harris Interactive poll found that only 8% of people surveyed thought that their smoke alarm going off meant there was a fire or they had to get out.

The trouble is, if there really is a fire, the delay could mean the difference between life, being maimed, injured or killed.

#### **DEATHLY SILENCE**

Despite the fact ionisation alarms false alarm so frequently, when you need them most, they may remain deathly silent. Why?

Because ionization smoke alarms do not detect visible smoke, instead they detect sub-micron particles of combustion - exactly what you get when cooking toast.

continued page 5 . . .



One of the worst things about ionization smoke alarms is they lull people into a false sense of security.

## Australia's Flawed Smoke Alarm Standard

#### The Key to Exposing the Global Ionization Smoke Alarm Scandal

Discover how:

- a) Standards Australia's FP-002 committee formally acknowledged Australia's existing Smoke Alarm Standard (AS3786 - 1993) is flawed because the existing testing allowing them to pass has now been deemed invalid.
- b) Standards Australia rewrote AS3786 and eliminated the flawed (MIC 'X') testing.
- c) CSIRO test data since 1993 shows that under the corrected, draft smoke alarm standard ionization smoke alarms will fail the existing, valid smoke test.

#### **Existing Flawed Standard** Currently in Force

#### Table 3.1 SENSITIVITY LEVELS FOR SMOKE DETECTORS

	Sensitivity				
	Smoke Alarm Type	Average sensitivity	Individual Sensitivity		
(a)	Photoelectric Percent obscuration per metre (% Obs/m)	3 to 15	3 to 30		
(b)	Ionization – MIC 'X' value	0.1 to 0.5	0.1 to 0.6		

#### **Corrected Draft Standard**

Awaiting Adoption into the Building Code of Australia by the Australian Building Codes Board

Table 3.1 SENSITIVITY LEVELS FOR SMOKE DETECTORS

	Sensitivity				
	Value	Nominal (S)	Individual minimum	Individual maximum	
(a)	% Obs/m	3 to 15	1.5S or S+2	0.5S or S-2	

The 'MIC X' testing has been eliminated from corrected, draft standard. Under the draft Standard ionization (particle of combustion) alarms would have to pass the same valid test for visible smoke that photoelectric smoke alarms have been required to pass since 1993.

#### So Why Do Ionization Smoke Alarms Activate When Cooking but Fail so Frequently in Smouldering Fires?

#### Why the Existing Standard is Flawed

Testing under the existing (flawed) Standard requires: (a) a valid test for visible smoke for photoelectric smoke alarms, and,

(b) a separate, test for invisible, sub-micron, particles of combustion for ionization alarms. (see table 3.1)

1. Several of the worlds largest ionization smoke alarm manufacturers are defendants in a proposed class action law suit which states, "lonization smoke alarms . . . are slow to warn, if they warn at all of smouldering fires, which typically occur while occupants are sleeping."

www.theWFSF.org/classaction

2. Standards Australia has acknowledged Australia's existing Smoke Alarm Standard is flawed and have corrected the flawed standard. In the corrected, draft Standard, ionization alarms will have to pass a valid test for smoke, the same test photoelectric alarms have had pass since 1993.

#### **Quote by Mr David Isaac, Member Standards Australia Committee FP2:**

"The credibility of the procedures for smoke alarm testing has been challenged for over thirty years. In 2006, the Australian Standards FP2 Committee investigated the testing requirements for smoke alarms alarms in Australia.



**David Isaac** Standards Australia

They discovered that if Member Committee FP2 ionization alarms were required to pass the same Australian Standards smoke sensitivity criteria as photoelectric smoke alarms they would fail."

www.theWFSF.org/can

Because they detect the sub-micron particles given off by the red hot heating elements of the toaster or griller.

Tragically sub-micron particles are not given off in sufficient quantity in most smouldering fires (which are low-heat) so your ionization alarms may remain silent until AFTER the fire finally bursts into flames when it is often too late. See 'The Aquarium Test' at: www.theWFSE.org NOTE: Clause 2.1 of Australia's Smoke Alarm Standard (AS3786) requires that smoke alarms must respond reliably to the presence of smoke, NOT the presence of invisible (sub-micron) particles of combustion which is what ionization 'smoke' alarms detect.

"Australia's acknowledgement of flawed Standards testing exposes the global ionization smoke alarm scandal and is the key to saving thousands of lives." Adrian Butler, Chairman, The World Fire Safety Foundation, Queensland, Australia, October, 2010

www.theWFSF.org/sa

### The Global Smoke Alarm Scandal

Beginning to be Exposed Across America



California's Albany Fire Department Warning about Ionization Smoke Alarms Deadly Defects

www.theWFSF.org/sfc

# Replace <u>YOUR</u> "Deadly Smoke Detectors" Now!

www.TheWorldFireSafetyFoundation.org

Legislation mandating the use of photoelectric smoke alarms has been passed (to varying degrees depending on the State) in California, Iowa, Maine, Massachusetts, North Carolina and Vermont.

#### THE BIG LIES: #2

"Any Smoke Alarm is Better than No Smoke Alarm."

Of course, on the surface this argument sounds reasonable - but does it have any integrity?

As we've already discovered:

- 20% 30% of us have disabled our alarms;
- 92% of us don't react quickly to an alarm because we think: "it's probably just another false alarm"; and
- in the type of fire that accounts for more than 70% of fire deaths, the alarm may not sound in time anyway.

So, knowing that, is it any wonder CBS Atlanta recently declared ionization type smoke alarms as "Deadly"?

And isn't this hypocritical of the fire service and other authorities to criticise people for disconnecting their alarm and for being complacent?

#### **BIG NUMBERS**

After all, we aren't talking about 2% - 3% of people who disconnect their smoke detectors because of false alarms, we are talking about 20% - 30% - that's a pretty big chunk of the population.

And it is a staggering 92% of people who, due to those frequent false alarms, are complacent. Ninety-two percent!

#### WHEN WILL THEY LEARN?

How big do the bureaucrats need those numbers to be before they get the message: the problem isn't the people, it's the product!

#### The BIG LIES: #3

"There's 3 Causes of Fire: Men, Women & Children."

One line that the fire services and other authorities like to trot out is that there are three causes of fire: men, women and children.

Well, there are three causes that still allow the ionization smoke alarm to still be marketed: bureaucrats, pencil pushers, and politicians - all of whom are more interested in covering their backsides than they are in getting the truth to the public.

They would rather put the blame back on you - on the men, women, and children - rather than admit they got it wrong.

They would rather point the finger at you than admit they

were duped by clever cons and deceptive advertising cooked up by ionization smoke alarm manufacturers.

#### **CHANGING TIDE**

In the early days of our campaign, we were laughed at and derided by fire authorities and told we did not know what we were talking about.

Now, years later, those same fire authorities have adopted our stance that all homes be fitted with

photoelectric smoke alarms, as their official position.

Yet, even so, so far as the public is concerned the authorities continue to sit on the fence, afraid of the damage to their reputation if admit the truth, because then the public may ask some uncomfortable questions about why they allowed this appalling situation to happen in the first place.

#### NOT FIT FOR PURPOSE

However, fence sitting is simply not good enough. Having admitted the problem with ionization type smoke alarms, it is now time for fire authorities and consumer bodies to admit that ionization alarms are 'not fit for purpose' and alert the public before more lives are lost.





Just two of the many ads from the 60's making false, misleading and/or deceptive claims about ionization smoke alarms.

www.theWFSF.org/classaction

Are You Protecting Your Family?					
SAFETY TO THE SA	Smoke Alarm Type:				
www.TheWFSF.org	Photoelectric	Ionization			
Environment:	100% Safe	Radioactive			
False Alarms:	Few	Frequent			
Failure Rate:	Low	High			
Located:	Commercial Buildings	Almost Every Home			
Price:	Affordable	Affordable			
For more information: www.theWFSF.org/compare					

# What Should I Do Now?

1. Watch Smoke Alarm Recall: www.theWFSF.org

"Fire fighters haven't been told the truth. Watch Smoke Alarm Recall and discover the facts about ionization alarms for your yourself."

Peter Cannon, President, Volunteer Fire Fighters Association, NSW, Australia, August, 2008



Peter Cannon, President, VFFA, NSW, Australia



#### 2. Hear the Radio Interviews & See Your Fire Brigades OFFICIAL Position:







Service Authorities Council

www.theWFSF.org/afac