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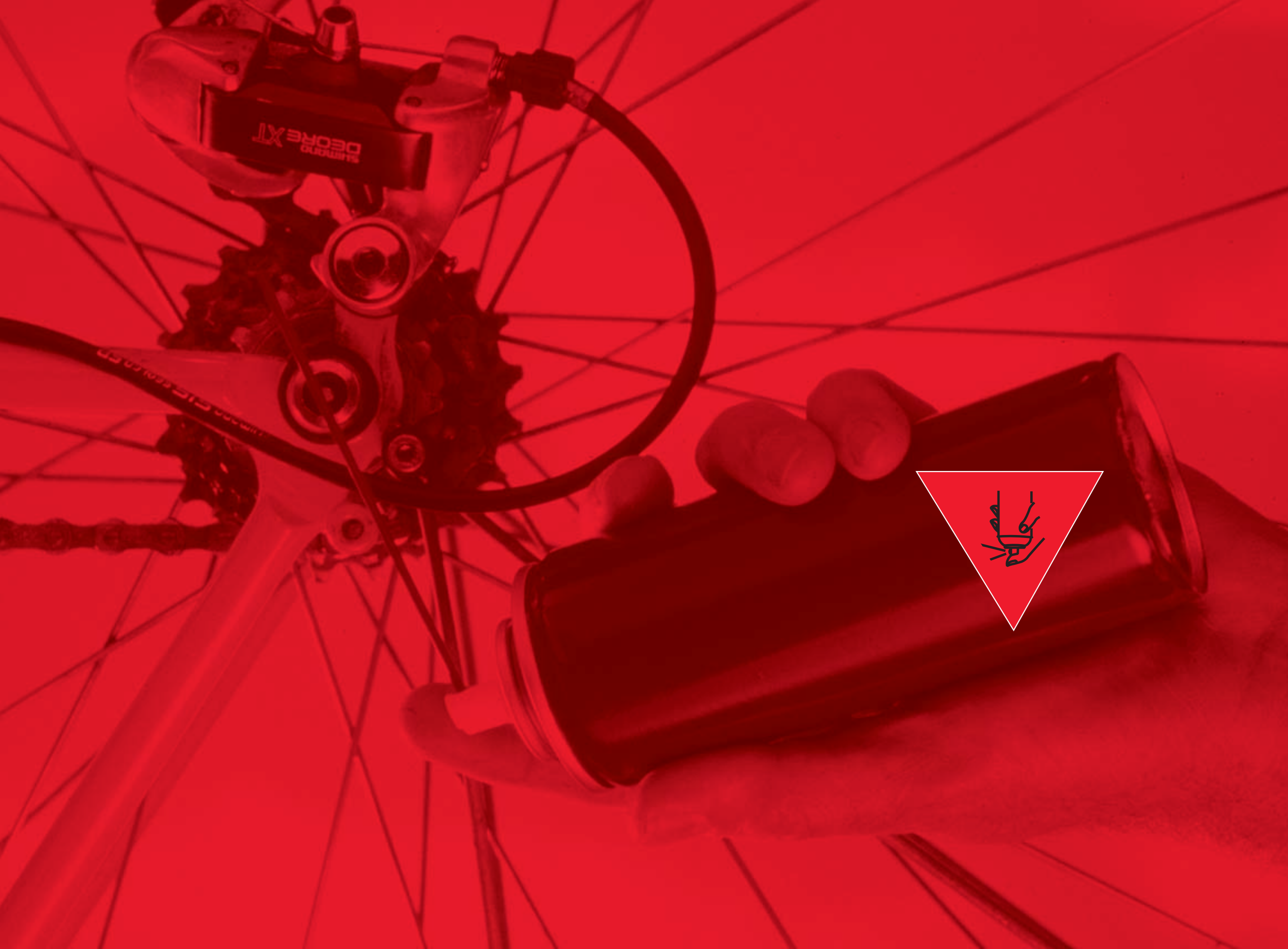
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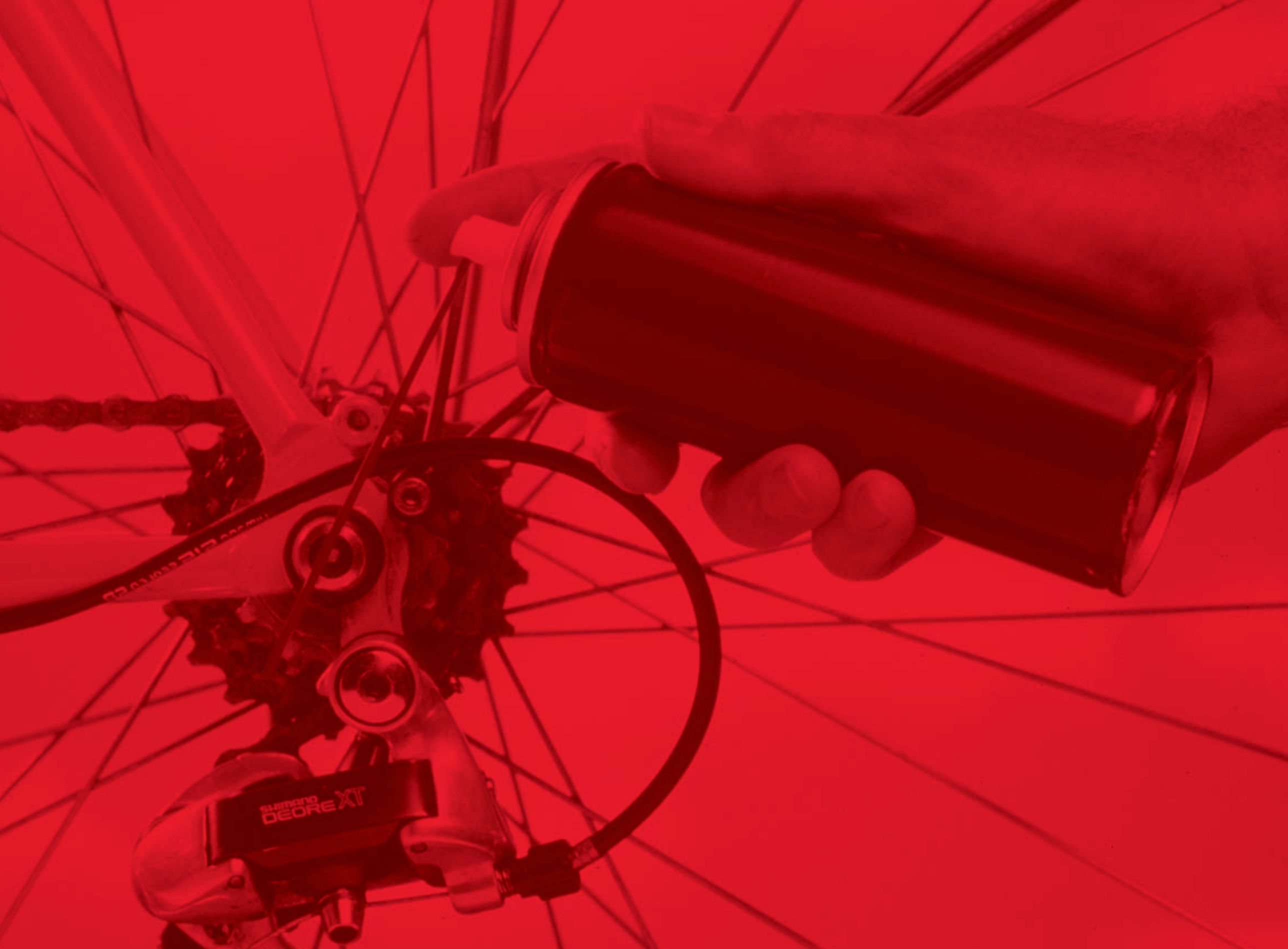
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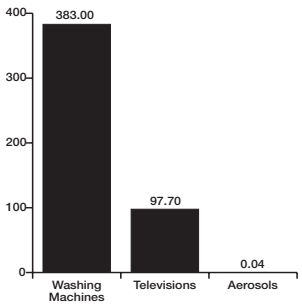
1. Summary and conclusions

1. The number of accidents and any associated injuries and fatalities caused by igniting aerosols is very small. Based on the five countries for which data has been gathered and grossing up to the total EU, there are an estimated 120 incidents, 75 injuries (of which 25 are serious requiring in-patient treatment) and 0.35 deaths per annum.

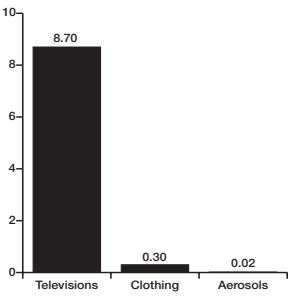
	Population	Aerosols sold	Incidents pa	Injuries pa	Deaths pa
Total EU	370 m	3,315 m	120	75	0.35

Source: Sambrook Research International estimates based on executive interviews

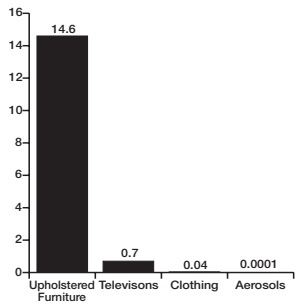
2. Based on the number of accidents per million products purchased each year, aerosols present a negligible fire risk to consumers compared to other commonly used consumer products, such as washing machines, upholstered furniture, televisions and clothing.



Fires per year per million products purchased



Injuries per year per million products purchased



Deaths per year per million products purchased

3. No blind or partially sighted person is known to have been involved, injured or killed in an incident caused by an igniting aerosol in the last 5-10 years in Europe.

4. The European Blind Union (EBU) and member associations consider the use of TDWs necessary only to warn blind people of the primary risk of the aerosol's contents, ie toxicity and corrosivity, rather than for a secondary risk, such as flammability. Only one TDW should be used for all dangers.

5. The cost of placing a TDW on aerosols indicating fire hazard for UK industry alone is estimated at £5 million per annum. The cost of a focused safety campaign aimed at the blind and partially sighted would be about £0.3 million per annum.

2. Research background and objectives

2.1 Background

The DTI Consumer Safety Unit (CSU) is responsible for ensuring that products purchased by consumers are safe in reasonably foreseeable conditions of use. Several billion aerosols are sold throughout Europe each year, about 850 million in the UK alone. Following the Montreal protocol, most aerosols changed from using CFCs to solvents and propellants based on propane and butane, both of which are highly flammable.

The Aerosol Directive 75/324/EEC provides for fire safety of aerosols and required all dispensers, with contents including more than 45% by weight or 250g of flammable components, to be marked 'flammable' or with a flame symbol. Following a serious accident in France involving the ignition of an aerosol, the Aerosol Directive was amended by 94/1/EC citing classification methods in the Dangerous Substances Directive (67/548/EEC) and introduces the possibility of derogation in certain circumstances. The effect of this is to classify most aerosols as extremly flammable or not at all.

However, a further directive 90/35/EEC means that aerosols that fail tests under directive 94/1 and attract the highly and extremely flammable label, may trigger the requirement of a tactile danger warning (TDW). The European Blind Association has lobbied the Commission not to have TDWs placed on aerosols for the secondary hazard of flammability, preferring the primary hazard of a product (ie corrosiveness or toxicity) to be indicated in this way. Furthermore, the placing of TDWs on aerosols is very expensive and strongly resisted by industry, for which there is no perceived ensuing safety benefit.

In order to enhance the discussion of these complex issues, the DTI CSU believes it is important to have a clear understanding of the actual level of risk presented by aerosols igniting under foreseeable conditions of use, throughout different EU member states.

2.2 Research objectives

The aim of the research was to evaluate the ignition risk of aerosols under normal foreseeable conditions of use, and in particular to assess the number of incidents, injuries and fatalities caused by ignition of aerosol dispensers in several EU member states.

2.2.1 Definition of 'bona fide' accidents used in the report

A 'bone fide' incident is defined as an incident caused by an aerosol igniting under what are considered normal foreseeable conditions. An incident is judged 'bona fide' if the person's intention was not deliberate or an act of vandalism, ie they had no knowledge that the aerosol was there, or were not aware of the consequences of their actions or were forgetful. It excludes deliberate setting alight of an aerosol, for example with a lighter or match, and other misuse activities, such as deliberately throwing the aerosol onto a bonfire or into a stove. Fires includes all incidents and not just those which result in attendance by the fire brigade. Only consumer accidents in the home and in pursuit of leisure activities are included. Excluded are incidents in factories or non-domestic buildings.

3. Incidents, injuries, deaths from aerosol ignitions

There are an estimated 120 incidents, 75 injuries of which 25 are serious and less than one death per annum in the EU due to accidental ignition of aerosols.

3.1 Summary analysis of incidents caused by ignition of aerosols

Ignition of aerosols is an infrequent occurrence and any resulting fires do not usually involve attendance by the fire brigade; indeed, such incidents are unlikely to be recorded as a causal category statistic by fire brigades. Detailed searches of the longer established EHLASS databases and press cuttings services highlight the rarity of such incidents and of any injuries resulting from them.

The following table sets out estimates of the frequency of incidents/fires, injuries and deaths per annum for each of the six countries researched in depth, plus Austria.

Country	Incidents per annum	Injuries per annum	Deaths per annum
Austria	1-3	dk	dk
Denmark	6-16	8	0.0
France	15-30	15	0.0
Germany	dk	dk	dk
Italy	5-10	5	0.0
Netherlands	4-8	4	0.0
UK	19	10	0.2

Source: Sambrook Research International estimates based on executive interviews

Notes on the above table

1. The incidents per annum include fires both attended and not attended by the fire brigades. It is estimated that of all the fire incidents involving attendance by a fire brigade the majority are very minor.
2. The use of the term 'dk' means that no cases have been recorded or were known about, it does not mean that incidents, injuries or deaths have not occurred.

Based on the number of aerosols sold in the five countries (Denmark, France, Italy, Netherlands and UK) for which data has been identified and collected, and estimates given in the table above, the following sets out a grossed up estimate of the total incidents/fires, injuries and deaths for all EU member states.

	Population	Aerosols sold	Incidents pa	Injuries pa	Deaths pa
Total 5 countries	193.4 m	1,862 m	50-86	42 (14)	0.2
Total all EU members	370 m	3,315 m	120	75 (25)	0.35

Source: Sambrook Research International estimates based on executive interviews

Notes on the above table

1. The estimates of incidents, injuries and deaths identified in the five countries researched (population 193m) have been pro-rated up (by a factor of 1.78) to give an estimate for all EU countries (population 370m).
2. Total incidents/fires for all EU members is in the range of 90-155 per annum, average is rounded to 120.
3. Serious injuries, whereby people are retained in hospital subsequent to a visit to the A&E department are shown in brackets () in the Injuries pa column; serious injuries represent about 30-40% of all injuries.

3.1.1 Trends in the frequency of aerosol ignitions

Analysis of the data and information contained in the report and appendices indicates no evidence of any significant rise or fall in the incidence of igniting aerosols, therefore, the numbers are assumed to be static or moving very slowly despite significant growth in the sales of aerosols.

3.1.2 Accuracy of estimates and confidence limits

The estimates of incidents in the above table are probably conservative. Incident numbers are sometimes based on the views and memory of fire brigade and other respondents, rather than on recorded facts which were not available or accessible; igniting aerosol incidents are not usually recorded as a separate causal category of fires.

Confidence limits for each country are stated in the text where estimates can be made based on incidents that are known to have taken place. In general confidence limits are in the range of -50% to +100%.

3.2 How (igniting) aerosol flammability incidents compare with other consumer products

The following table shows the estimated number of incidents/fires and associated injuries or deaths caused by five different consumer products (televisions, clothing, upholstered furniture, washing machines and aerosols) based on past studies carried out on behalf of the DTI CSU. In addition, the table normalises the number of incidents by the estimated number of each type of product purchased each year.

	Fires	Injuries	Deaths
Washing machine fires - Europe	4600	n/a	n/a
Washing machine fires (pmcpp) - Europe	383	n/a	n/a
Upholstered furniture fires - Europe	n/a	n/a	365
Upholstered furniture fires (pmcpp) - Europe	n/a	n/a	14.6
Television fires - Europe	2200	197	16
Television fires (pmcpp) - Europe	97.7	8.7	0.7
Clothing fires - UK	n/a	670	80
Clothing fires (pmcpp) - UK	n/a	0.3	0.04
Aerosol fires/incidents - Europe	120	75	0.35
Aerosol fires/incidents (pmcpp) - Europe	0.036	0.022	0.0001

Assumptions/notes on the above table

1. pmcpp = per million consumer products purchased (each year). n/a means data not available (or not within the scope of that particular study).
2. The accident data is based on reports produced by Sambrook Research International on behalf of, and published by the DTI CSU.
3. An estimated 22.5 million televisions are sold per annum in the EU.
4. 2000 million articles of clothing purchased annually in the UK. Detailed accident data was only obtained for the UK. However, data in the Netherlands suggest slightly lower levels of accidents per million population. Data supplied by the Danish Health Board indicated similar levels of accidents to the UK.
5. 25 million pieces of upholstered furniture sold per annum in the EU.
6. An estimated 12 million washing machines are sold annually in the EU.
7. An estimated 3,315 million aerosols are sold annually throughout the EU.

Conclusion - the number of incidents per million products purchased by consumers each year show that aerosols present a negligible risk for causing fires as well as fatal or non-fatal injuries, compared to other commonly used consumer products such as washing machines, upholstered furniture, televisions and clothing, for which there are no flammability requirements.

3.3 Individual country details of incidents, injuries and deaths from igniting aerosols

The following briefly details for each country the information gathered on incidents, injuries and deaths of igniting aerosols.

Further information and data are contained within the appendices, in particular for those countries where face-to-face interviews were conducted.

3.3.1 Austria

Incidents per annum	Injuries per annum	Deaths per annum
1-3	dk	dk

Vienna fire brigade could recall two bona fide fire incidents attended over the past five years. The details of the first, which happened about three years ago, could not be recalled but was thought 'similar in nature' to the second case, which took place recently (November 1996).

"A person was using a foam insulation product, but because it was cold he put it on the stove to warm up. He forgot he had put it there and it exploded causing extensive fire damage to the house."

Based on these two cases and grossing up for the whole country, would give a frequency of 2-3 incidents per annum, confidence limits on this estimate are in the range -50% to +100%.

The Austrian Aerosol Association stated that incidents do occur, but are rare and probably less than one per annum; attributed to misuse, such as people heating a canister on a stove. No injuries from such incidents could be recalled.

Sicher Leben interrogated its EHLASS database of 9,097 cases (since inception in April 1996) and had no injuries recorded as a result of incidents of this type.

No deaths were known to have been caused by incidents of this type.

3.3.2 Belgium

Incidents per annum	Injuries per annum	Deaths per annum
dk	dk	dk

Antwerp Fire Brigade and the National Association for the Protection against Fire (ANPI/NVBB) were not aware of any accident of this type in the past, and certainly none within the past five years.

3.3.3 Denmark

Incidents per annum	Injuries per annum	Deaths per annum
6-16	8	0.0

Copenhagen and Aarhus fire brigades and Copenhagen police's fire investigation department could not recall any cases of fires caused by ignition of aerosols, although they said that they could not rule out the possibility of such incidents occurring.

The Danish Blind Association could not recall any incidents of igniting aerosols involving blind people.

An investigation by the National Board of Health of the EHLASS database of about 325,000 records over the period 1989-1995, produced six cases (ie eight injuries from six separate incidents) that were found to be bona fide and relevant to the study, an injury rate of 1.14 per annum.

Applying the national multiplier (7) to this bona fide incidence rate would give a Danish injury incidence rate of eight injuries per annum. This injury estimate is thought reasonable because of the coverage and nature of the Danish EHLASS database, with confidence limits in the range -20% to +75%.

There is no readily available data in Denmark on incidents/fires resulting in no injuries. However, comparison with other countries, notably UK where the number of incidents is approximately twice the number of injuries, would give an upper limit to the total number of incidents/fires in Denmark of 16. The annual number of incidents/fires is, therefore, estimated to be in the range of 6-16; confidence limits are in the range -20% to +50%.

The National Board of Health's deaths register for 1988-1993 recorded no cases of fatal injuries where the cause was an igniting aerosol; no details are yet available for 1994-95.

3.3.4 Eire

Incidents per annum	Injuries per annum	Deaths per annum
dk	dk	dk

Dublin and Cork fire brigades could not recall any specific cases of incidents caused by ignition of aerosols over at least the last five years.

Department of Health (EHLASS) was unaware of any cases of injuries or deaths caused by aerosols igniting. However, the category of 'accidents caused by aerosols' is not coded separately in Eire's system, which is based on two hospitals recording a total of 6,500 cases (1995) and it was not possible to interrogate the data further to confirm this result.

Other bodies interviewed, such as Office of Consumer Affairs, National Safety Council and National Council for the Blind, could not recall any incidents caused by aerosols igniting.

3.3.5 Finland

Incidents per annum	Injuries per annum	Deaths per annum
dk	dk	dk

No specific cases of accidents caused by ignition of aerosols could be recalled by Helsinki, Tampere or Turku fire brigades, which account for 27% of the population.

EHLASS statistics are at an early stage and no classification for aerosol incidents exist.

The Finnish Blind Association and Finnish Aerosol Association respondents could not recall any incidents caused by aerosols igniting.

3.3.6 France

Incidents per annum	Injuries per annum	Deaths per annum
15-30	15	0.0

Interviews with five city fire brigades (Paris, Lille, Lyon, Marseilles and Strasbourg, which cover 17.7% of the French population) produced recall of only one incident over the past 10 years; this concerned a man, about five years ago in Paris, who was burned whilst spraying pesticide. It was remembered because the case made national news.

An investigation of the EHLASS database of 334,000 records 1988-1995, produced four cases of injury involving aerosols, that were considered to be bona fide and relevant to the study. The four injuries occurred in three incidents; one incident involved two injuries.

Based upon coverage and nature of the EHLASS data and using the national multiplier of 30, it is estimated that 15 injuries per annum occur as a result of bona fide aerosol ignitions; confidence limits are in the range of -20% to +75%.

There is no reliable data in France on the number of incidents/fires where no injuries have resulted. However, comparison with other countries, notably UK where the number of incidents is approximately double the number of injuries, would suggest 30 as an upper limit to the number of incidents/fires. The annual number of incidents/fires is, therefore, estimated to be in the range of 15-30; confidence limits are in the range -20% to +50%.

Other respondents, such as the *Ministry of the Interior* and the *Laboratoires Centrales de la Prefecture de Police, Paris* could not identify any relevant cases from their records or recall any incidents in the last five years.

The *Federation of blind and visually handicapped persons* could not recall any incidents, in the last six years, of aerosols being the cause of fire and/or injury to blind/visually impaired persons.

No deaths had been recorded, or could be recalled, as a consequence of an igniting aerosol.

3.3.7 Germany

Incidents per annum	Injuries per annum	Deaths per annum
dk	dk	dk

Exhaustive research through a significant number of the major organisations involved in statistics, fire protection and detection and reporting have produced no positive findings where the cause of the fire was the ignition of an aerosol.

Seven major fire brigades (Berlin, Hamburg, Munich, Frankfurt, Köln, Hannover and Magdeburg, representing about 12% of the population) all stated, with the exception of Magdeburg, that they had no experience of this type of ignition, and could recall no incidents during the past five years. The Magdeburg respondent recalled, in 1995, an explosion in a kitchen cabinet where it was thought the cause could have been an aerosol that overheated. There were no injuries.

EHLASS - Bundesamt für Arbeitschutz were unaware of any cases of injuries or deaths caused by aerosols igniting. However, this source is not coded in their system and alternative methods of interrogating data were not available to confirm this result.

The German Aerosol Manufacturers Association had no relevant details about aerosol fires or press cuttings relating to incidents of igniting aerosols in Germany.

Landeskriminalämte (police) did not have records of aerosol fires or injuries/deaths related to aerosol incidents. Berlin and Hessen both said that there was unlikely to be any criminal act involved and, as such, it would be left to fire brigades or insurance companies.

Insurance organisations did not have any information about incidents involving the ignition of aerosols, but one stated that it would be very rare.

Bundesministerium für Gesundheit (Ministry of Health) considered that the number of injuries would be very low and no specific incidents could be recalled.

Press Archives Two of the major press organisations in Germany, Der Spiegel and Frankfurter Allgemeine, confirmed that they could find no cases in their documentation archives, Der Spiegel over the last 10 years and Frankfurter Allgemeine over the last five years. The Springer Group stated it had records of three articles, over the last 10 years, on aerosols igniting, however, two of these articles contained only warnings of the potential danger of igniting aerosols, and the third reported a non-bona fide incident.

Statistisches Bundesamt had never heard of any cases where death was caused by the ignition of an aerosol. The opinion was that it was possible but that it would be very rare.

3.3.8 Greece

Incidents per annum	Injuries per annum	Deaths per annum
dk	dk	dk

The Athens Fire Brigade was unaware of any accidents involving aerosols, other than malicious.

The Hellenic Aerosol Association was also unaware of any accidents of this type involving aerosols in the past ten years.

3.3.9 Italy

Incidents per annum	Injuries per annum	Deaths per annum
5-10	5	dk

The Ministry of the Interior and six major fire brigades in Italy (Rome, Milan, Turin, Florence, Brescia and Bergamo, accounting for an estimated 27% of the population of Italy) had no knowledge of any incidents of fires caused by the ignition of aerosols. Two of the brigades thought that these might happen very rarely (say once in five years), possibly due to spraying the aerosol too near a naked flame (cooker etc.) or placing the aerosol too near a fire, but could recall no specific incidents.

The Italian Aerosol Manufacturers Association knew of two specific incidents: one where a man cooking eggs put an aerosol can too near the flames, and it exploded and burnt his hand, and the other where an aerosol inside a car was heated by the sun and exploded. The respondent further estimated that possibly 3-5 such incidents are reported in the press each year and that no more than 10 such incidents are likely to happen (recorded or unrecorded).

The Ministry of Industry searched its EHLASS database of A&E cases for the period 1987 - 1995. The system retrieved only one incident involving injury, in 1988, that is bona fide. This case involved a 73 year old woman who was lighting a heap of leaves, unaware of the presence of an aerosol, which exploded.

If the number of injuries (1 in 8 years) is multiplied by the national multiplier (50) this suggests that somewhere in the order of 5-6 injuries per annum is possible. However, it must be stressed that this calculation is not statistically valid, but does reinforce the general finding that accidents caused by the ignition of aerosols are extremely rare. Confidence limits on the above would be -50% to +150%.

The Italian Blind Union was unaware of any blind or partially sighted people involved in any accidents caused by the ignition of an aerosol.

The research identified no press cuttings services that had been established to collect newspaper reports on fires caused by aerosols, and none of the press cuttings agencies contacted were able retrospectively to interrogate their press cutting databases for such incidents.

3.3.10 Luxembourg

Incidents per annum	Injuries per annum	Deaths per annum
dk	0.0	dk

The Fire Brigade in Luxembourg was not aware of any accidents of this type involving aerosols.

EHLASS and the Hospital for the whole of Luxembourg thought there were few accidents involving aerosols, and inspection of the EHLASS database for the three-year period 1993-1995 showed that no injuries were recorded as caused by the ignition of aerosols.

The Association des Aveugles du Luxembourg (Blind Association) was not aware of any accidents of this type involving aerosols affecting the blind and partially sighted.

3.3.11 Netherlands

Incidents per annum	Injuries per annum	Deaths per annum
4-8	4	0.0

Four major city fire brigades (Amsterdam, Rotterdam, Den Haag and Eindhoven covering 15% of the population) whilst not ruling out the possibility of fires caused by igniting aerosols, could recall only one incident of an igniting aerosol within the past five years.

"*Two children had been spraying a cat with hair spray, which ignited when it walked past a gas heater, and then set light to curtains. There were no injuries to the children.*"

This would indicate that fires are rare occurrences, but there is likely to be at least one a year.

The NAV (Dutch Aerosols Association) thought that there were one or two incidents a year, and recalled a recent case of where a man had placed a can of spray paint on a gas heater to warm up, went to make a cup of coffee.

"*He forgot about it, the can burst and the vapour ignited. He had no shed left.*"

A search of the Stichtung Consument en Veiligheid's Brandwondenregistratie database 1984-1994 for patients treated at all three burns-units in the Netherlands produced seven cases of burns injury involving aerosols that are classified bona fide and as relevant to this study.

An investigation of the Stichtung Consument en Veiligheid's EHLASS/PORS database 1986-1995 for patients treated at the A&E departments of 14 hospitals in the Netherlands (10% of all accidents) produced three cases of injury involving aerosols that are bona fide and relevant to the study.

Grossing up this data using the national multiplier of 10 for the EHLASS/PORS data and adding the burns register data, would indicate an overall incidence rate of four non-fatal injuries per annum for the Netherlands. Given the longevity and nature of these databases the accuracy of this figure is considered to be reasonable and within confidence limits of -25% to +100%.

There is no reliable data in the Netherlands on the number of incidents/fires where no injuries have resulted. However, comparison with other countries, notably UK where the number of incidents is approximately double the number of injuries, would suggest eight as an upper limit to the total number of incidents/fires. The annual number of incidents/fires is, therefore, estimated to be in the range of 4-8; confidence limits are in the range -20% to +50%.

No fatalities caused by igniting aerosols have been identified.

3.3.12 Portugal

Incidents per annum	Injuries per annum	Deaths per annum
dk	dk	dk

Lisbon Fire Brigade had not heard of any such accidents, and thought they would be very unlikely. This was confirmed by the Portuguese Aerosol Association (APA).

3.3.13 Spain

Incidents per annum	Injuries per annum	Deaths per annum
dk	dk	dk

EHLASS and the Institute of Consumer Affairs were not aware of any incidents involving aerosols. Respondents felt that consumers were aware that aerosols are flammable and handled them accordingly.

3.3.14 Sweden

Incidents per annum	Injuries per annum	Deaths per annum
dk	dk	dk

Stockholm, Gothenburg and Uppsala fire brigades (accounting for 15% of the population) could not recall any fires caused by an aerosol igniting.

The Swedish Aerosol Association could recall no such incidents.

The EHLASS database covering 17,025 accidents from four hospitals in 1995 contains no record of cases caused by igniting aerosols.

Svenska Dagbladet searched its files over the past five years and stated that no articles had been written about fires or injuries caused by aerosols igniting.

3.3.15 UK

Incidents per annum	Injuries per annum	Deaths per annum
19	10	0.2

10 county fire brigades (representing 23% of the UK population) were contacted. West Midlands (the largest contacted) estimated one incident a year, Kent recalled two in the last five years, Buckinghamshire recalled one fatal incident in the last five years and the seven others were not aware of any incidents. This would suggest at least six incidents per annum, although it is certainly an under-estimate, as incidents caused by igniting aerosols do not come to the attention of the fire brigades.

HASS/LASS/HADD. A search on the UK HASS (Home Accident Surveillance System) LASS (Leisure Accident Surveillance System) and HADD (Home Accident Deaths Database) databases of 1.25 million accident cases, between 1989 and 1994 (using word strings for aerosols, cans, etc as well as end-use words such as hair spray, deodorant, etc) identified only two injury cases that were considered bona fide. These involved two children under five playing with an aerosol near a fire. A calculation applying a national multiplier (20) to the two injuries in six years suggests an incidence rate of seven injuries per annum; however, it should be noted that this calculation is not statistically valid due to the very small number of incidents identified.

The British Aerosol Manufacturers Association (BAMA) has a very comprehensive record of incidents involving aerosols, collected through a press cuttings agency. Its records from January 1991 to August 1996, were searched and 77 bona fide cases identified, including one death. An average of 13.6 incidents a year.

Deaths are extremely rare. The one bona fide case, in 1995, caused the death of a woman aged 87, after she was using her hair spray next to the gas fire, and the fumes ignited.

Analysis of these bona fide cases recorded in BAMA's press cuttings indicates that about seven incidents a year occur where no people are injured and a further six incidents a year where eight to nine people are injured and go to hospital A&E units. Of the eight to nine injuries each year, about one-third involve minor injuries where the victim requires no/or minor treatment and is discharged immediately, and two-thirds result in 'serious' injuries and the victim detained in hospital.

Whilst the BAMA records are the most comprehensive available, it is reasonable to assume that the records underestimate the actual situation as there are bound to be incidents which have not received press coverage. Therefore, by applying multipliers to these BAMA figures (see Appendix) it is estimated that 19 incidents occur each year, resulting in 10 injuries and 0.2 deaths.

This estimate is considered to represent a reasonably accurate view of the number of incidents, injuries and deaths and confidence limits of -25% +50% are considered realistic.

The 77 bona fide cases in the BAMA press cuttings database were grouped into six main causes. The two most common incidents were:

- where an aerosol dispenser had been left near a heat source, such as a fire, and exploded
- where the aerosol had been sprayed near a heat source and the spray had ignited

Investigation of the BAMA cuttings (77 cases) and the one bona fide case from HASS/LASS not picked up by the BAMA cuttings indicated the most common products involved in this type of accident, where known, are hair spray (23%), followed by insecticides/pesticides (15.5%), air fresheners (11.5%) and deodorants (9%).

The research did not identify any rise or fall in the number of incidents, ie the level of incidents is fairly static, despite sales growth.