Families United Against Inhalant Abuse

April 2, 2021

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Chairman Robert S. Adler and Commissioners
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MS 20814

Re: Families United Against Inhalant Abuse's (FUAIA) Petition requesting the U.S. Consumer Product Safety Commission initiate a rulemaking for "Duster" aerosol products containing 1,1-Difluoroethane or any derivative thereof.

Dear Chairman Adler and Commissioners:

Enclosed in this mailing is the FUAIA's Petition requesting the U.S. Consumer Product Safety Commission initiate rulemaking for all Duster aerosol products.

Following the 2012 death of my son, Brandon, caused by his inhaling of Dust-Off, my family was so full of grief we could hardly function. Brandon's girlfriend took her own life 2 years later, my daughter left law school, and I retired early from my education administration position. Brandon had never used an inhalant before and was not an addict, yet he became quickly addicted to Dust-Off and died within 20 days of his initial use. During those horrendous 20 days of "intoxicated, addictive like behavior," he experienced involuntary eye movement, serious thermal burns, painful headaches, a black-out where he severely cut his upper lip (needing stitches) loosening his front teeth, and vomited blood. During that same 20-day period, he also had an extremely severe seizure for which he was hospitalized. He eventually died from Sudden Sniffing Death while alone in his apartment. Brandon was a college graduate and successful Steadicam operator whose career was moving forward. To think that educated and employed middle class individuals are not represented in the victim population of Duster inhaling is inaccurate. My family's loss is tremendous and we have a void that can never be filled.

Families United Against Inhalant Abuse

Following Brandon's death, I began researching the use of Duster as an inhalant and quite shockingly discovered that it is an extremely popular practice and has been ongoing for over 50 years (since it was created). Every family our foundation has worked with directly who dealt with a loss from Duster inhalant use found themselves in the same situation as our family; totally unaware of this potentially deadly situation and it's horrifying consequences. This dangerous activity unfortunately continues today without any regulation from manufacturers, retailers, or even government agencies such as yours—the CPSC. I find this situation appalling!

In 2019, I created the non-profit foundation, Families United Against Inhalant Abuse (FUAIA) to inform families about the extreme dangers of inhalant use. During the last few years, the foundation has collected inhalant death data from medical examiners across the United States for the period 2007-2017. We then analyzed the data in detail in an effort to determine which inhalants caused the most deaths, and to evaluate whether the trend was increasing. We soon found that Duster was the PRIMARY inhalant involved in these deaths and that the trend was increasing in most areas and maintaining in the rest. It is obvious that the previous claim of *only 100 inhalant deaths annually in the U.S.* made by both the industry funded Alliance for Consumer Education and the National Inhalant Prevention Coalition is far from the truth.

I do hope that the Commission, after review of our findings, determines that it is finally time to address the inhalant use of Dusters and will take serious measures to deal with the problem. This Petition is fully supported by the FUAIA Board Members and numerous individuals and families who have had to deal with the inhalant use and/or death of a loved one. We look forward to your response regarding our Petition.

Sincerely,

Claudia F. Dimit

Claudia F. Dimit, Ph.D. – Board President
Families United Against Inhalant Abuse

The United States of America

Consumer Product Safety Commission

PETITION

Petition Request: We, the undersigned, hereby petition the Consumer Product Safety Commission under the Administrative Procedures Act, 5 U.S.C. 553 (e) and the Consumer Product Safety Act, 15 U.S.C. section 2058 to initiate rulemaking for "Duster" aerosol products containing 1,1-Difluoroethane or any derivative thereof.

Scope of the Issue

Duster aerosol products containing the chemical 1,1-Difluoroethane or similar hydrofluorocarbons have been used as inhalants for over 50 years. During this period of time, these products have been identified as the cause of death in several thousand user cases in addition to numerous auto accident fatalities where inhaling drivers hit pedestrians or other drivers. These user deaths encompass all ethnicities and genders and include individuals from 10 to 70 years of age. All socioeconomic groups are represented, along with all education levels and employment professions and status. Regulatory agencies from every state in the nation have compiled evidence of these Duster inhalant deaths and most have put laws in place making it illegal to use inhalants. In 2009, Saul Spigel, Chief Analyst for the Connecticut General Assembly, drafted a summary (*State Laws On Inhalant Use*) of all inhalant laws existing in the U.S. at that time. This information is organized alphabetically by state and includes the product/chemical addressed, the prohibited acts, and the penalties (Spigel, 2009). Although 42 states now have laws addressing inhalant use, there is no document available which summarizes all of this information. Unfortunately, this culmination of legislation currently in place has not made a positive impact on the problem. Duster inhalant use and deaths continue to rise throughout this country.

For the purpose of this Petition, inhalant abuse refers to the "*intentional inhalation of vapors from commercial products or specific chemical agents to achieve intoxication*." Abusers may inhale (commonly called huffing) vapors directly from a container, from a bag or balloon into which the substance has been placed, or from a rag soaked with the substance and then placed over the mouth or nose (American Psychiatric Association [APA],2000). Duster, for example, is most often inhaled directly from the can into the mouth. Intoxication occurs rapidly and is short-lived, although some users repeatedly or continuously self-administer inhalants to maintain a preferred level of intoxication (Howard, Bowen, Garland, Perron, and Vaughn, 2011).

The Product

Duster was invented in the 1970s by a company already involved in the compressed air manufacturing industry. Within the first decade of Duster's creation, a substantial number of inhalant deaths involving this product were identified. Due to the "unknown" aspect of the inhalant use problem with Duster, many additional deaths were not documented as such. As of today, Duster inhalant deaths are still not included in the majority of Medical Examiner Annual Reports. These deaths most often must be "requested" by researchers or interested parties.

For the purpose of this Petition, "Duster" products will refer to any hydrofluorocarbon propellant cleaner containing 1,1-Difluoroethane or similar derivative. This product is sold directly to the public (in any quantity) both in person and online for the purpose of cleaning electronic devices, photographic equipment, and any other item having areas where dust resides and is inaccessible by hand. The product is marketed under several different names (i.e., Cleaning Duster, Ultra-Duster, Air in a Can, Dust-Off, Blast Away, Blaster, etc.) with each containing the same chemical in a similar metal can with a spray mechanism on top for delivery. Duster products are currently sold in over 11,766 Walmart's, 1,897 Targets, 1,307 Office Depots, 1,067 Staples, 1,026 Best Buy stores, 2,291 Home Depots, 9,021 Walgreens, 9,967 CVS stores, 795 Costcos and 599 Sam's Clubs, etc. The list of retailers of this product is endless and the price varies from $2.95 to $6.95 per can with discounts for multipack purchases. Although several states require a purchaser to be 18 years of age or older, the general access to these products is overwhelmingly simple. A buyer for one of the major retailers claims his company earns $14.5 million annually on this product alone. It is likely that a large portion of the income from Duster purchases are for inhalant use rather than the intended dust removal. Ease of access as compared to other intoxicants is identified as a key component of Duster inhalant use.

The Dangers of Duster Inhalation

When the 1,1-Difluoroethane in Duster is inhaled from the can, intoxication occurs rapidly, yet is very short-lived (4 to 5 mins.). This very limited period of "euphoria" causes most inhalers to repeatedly or continuously self-administer to maintain an extended level of intoxication (Howard, Bowen, Garland, Perron and Vaughn, 2011). It is this mechanism that makes Duster extremely addictive. Individuals attempting to quit inhalation of Duster go through severe withdrawal symptoms similar to the those experienced with other drugs. The inhaling of this chemical is acutely dangerous and causes immediate brain damage and possible Sudden Sniffing Death (SSD). Twenty-two percent of first time Duster inhalers die, and the majority of all Duster inhalant deaths are attributed to SSD (Substance Abuse Life Tips, 2013).

Inhaling 1,1-Difluoroethane causes serious short and long-term physical damage. While inhaling, an individual's vision will become blurred, speech will be slurred, and they will lose coordination. Severe headaches, involuntary eye movement, dermal burns from the 1,1-Difluoroethane (which is a refrigerant) on hands and in the oral cavity will occur, along with experiencing bloody vomit (Hemoptysis). With frequent use, inhalers may hallucinate, experience seizures, and lose consciousness. Extended Duster inhalant use will damage kidneys, heart, lungs and visual and audio organs. Additionally, the nerves in appendages will atrophy along with the destruction of the myelin in the brain which surrounds neurons and supports information transmission. SPECT brain scans from inhalant users clearly show the brain atrophy that occurs resulting in decreased blood flow to the brain which ultimately inhibits the ability to process information. Brain damage from inhalant use far exceeds that found in users of cocaine, heroin, alcohol and other illicit drugs (Robert Mathias, Neil Rosenberg, M.D., NIDA, 2002).

The most common cause of death contributed to hydrofluorocarbon inhalation is Sudden Sniffing Death. SSD occurs when the inhaled 1,1-Difluoroethane replaces the oxygen in the lungs, thus depriving the brain of this needed compound. The brain panics and releases adrenalin which in turn, creates a situation of heart arrythmia and eventual heart failure. The vast majority of Duster related inhalant deaths are due to SSD. These individuals are typically found surrounded by numerous cans of Duster.

Accessibility of Duster

As previously stated, Dusters can be purchased at almost any store and online, in any quantity. All studies discussing inhalant abuse emphasize that the "easy access" and "inexpensive cost" of inhalants like Duster are the main reasons this particular inhalant is so popular. Although ALL retailers and ALL Manufacturers are fully aware of the extensive inhalant use of Dusters, they have not voluntarily made Duster a "behind the counter" purchase product nor put in place a "limited sales" system to track individuals continually purchasing large quantities. Several of these companies have been sued multiple times and instead of addressing the problem with an effective solution, they continue to place the blame on the inhaler. When you know a product you sell is being used extensively as a deadly "drug of choice" and you do nothing to stop the practice, you're as much to blame for the situation as the user. If this were not the case, we would not be arresting drug dealers who knowingly sell deadly narcotics to others. We request that all retailers be required to implement suitable "behind the counter" and "limited sales with tracking" practices.

Choice to Use and Understanding of Risk

The reasons for using Duster as an inhalant are the same for this product as they are for other drugs and alcohol. With teens and younger individuals, they will often choose inhalants due to the inexpensive cost and easy accessibility when compared to illicit drugs

and alcohol. Often peer groups will use Duster to get high, find it fun, and encourage others to join in. Peer pressure often comes into play in these situations until addiction occurs.

Other reasons for inhaling Duster can be to address personal depression, anxiety, sadness, and other emotional issues. The reasons to get "high" or "numb troubling thoughts" is the same for inhalants as it is for alcohol, heroine, etc. The upside to inhaling Duster (for the user) is that between inhales, the user quickly becomes very sober and functional. Inhalers do not have the nausea and other physical after-effects as with alcohol binging. The long-term health affects previously mentioned will become an issue after repeated use, particularly if the individual becomes addicted.

The majority of Duster inhalers do not understand the extreme danger involved in what they are doing, especially the younger individuals. People inhale all types of chemicals throughout their lives without any physical damage, so why would Duster be any different? Additionally, everyone has a can of Duster at home that they use weekly to clean their computer keyboard. The fact that many retailers advertise Dusters as "air in a can," also creates a tremendous misunderstanding for young individuals who actually believe this is the case. Kids have been inhaling helium balloons for fun for decades without harm, so why would Duster be any different. Although there is a warning on Duster cans which states that "Death may occur," it is buried within the other small, black print on the back of the can (Appendix B – Dust-Off and Ultra Duster can photos). Numerous product warning studies have concluded that unless a product is known for being dangerous, people don't pay attention to the warnings on the back (Arndt, Ayres, McCarthy, Schmidt, Wood and Young, 1998), (Ayres, 2004), and (Green, 2013).

Manufacturer and Retail Practices

Manufacturers and retailers are fully aware of the use of Duster as an inhalant, yet nothing has been done to address the problem. Stores do not make this product a "behind-the-counter" purchase nor do they limit or track the number of cans purchased by an individual. A 24-year-old woman in Texas purchased 60 cans of Duster from the same store over a 3-day period. She made 9 trips from her car in the parking lot during this time before she was found dead. She even had a seizure and was covered in feces when she was allowed to purchase these cans during her multiple trips (Sherman, 2016). This same manufacturer and retailer have had more than a dozen lawsuits filed against them, yet they have done nothing to rectify the situation. Hundreds of similar stories can be found throughout the internet with the same theme of "negligent retail practices." Several article links have been provided in Appendix B of this document for quick access.

In 2006, Falcon Safety Products (in a combined effort with DuPont) advertised that they had developed groundbreaking technology where the bitterant Denatonium Benzoate would be added to all cans of "Dust-Off" at 5-50 ppm (effective level is 30-40 ppm). This bitterant, when expressed in the spray with the 1,1-Difluoroethane, was supposed to decrease inhalant use by making the taste of the spray "unpalatable"

(Appendix A - Falcon Safety Products News Release, 2006; DuPont News Release, 2012). In theory, this was a good plan but not something easily accomplished. Recent product testing documents from two major manufacturers of Dusters (under several different names) demonstrated that most often the Denatonium Benzoate was never injected into the cans at all, and if it was, it didn't appear in the spray. These companies have known about this situation for over a decade, yet even with the looming threat of product fraud liability, they did nothing to correct the failure. Therefore, the success of using an aversive to decrease inhalant use of Duster is still unmeasured. To complicate this concept further, Denatonium Benzoate is a known bronchial dilator which would only enhance the absorption of the 1,1-Difluoroethane when delivered through inhalation.

Duster Inhalant Death Statistics in the U.S.

The inhalant use of Duster products is a chronic problem in the United States and has been continually gaining popularity in many U.S. states, while maintaining a stable level of use in others. While the use of inhalants was considered a teen problem in the 1990s, the popularity since 2000, has vastly increased to include individuals of all ethnicities, ages, genders, occupations and education levels. It is suspected that the lack of serious regulatory action of this product and ignoring the deaths involved, have allowed the inhalant practice to vastly increase.

Families United Against Inhalant Abuse (FUAIA; Florida non-profit) has been collecting inhalant death numbers from Medical Examiner offices throughout the U.S. for the 2007-2017/19 decade. This data documents all inhalant chemicals involved in these deaths and when possible, identifies the individual's ethnicity, age, and gender. The geographic areas included in this data collected to date are: Los Angeles County, CA; San Diego County, CA; Virginia; Florida; Travis County, TX; and 17 counties in Pennsylvania. Although random death numbers have been identified in various other U.S. states through media reports, these are the only areas at this time where complete Medical Examiner data has been provided.

From the 1109 inhalant deaths identified in this data, 648 of them were attributed to Duster inhalant use. The breakdown of these 648 deaths are: 75 deaths in Los Angeles County, CA; 56 deaths in San Diego County, CA; 112 deaths in Virginia; 352 deaths in Florida, 53 deaths in the 17 counties of Pennsylvania (74 total counties in PA), and 9 deaths in Travis County, TX. These Duster deaths have continued to increase from 2007 forward and remain at a stable level at this time. It is logical to expect there are similar results across all areas of the country.

From this data, Florida demonstrated the greatest increase in numbers of Duster deaths during the time period examined. Fourteen deaths were identified in 2007, with numbers climbing to 70, 74, 61, and 65 in the years 2014 to 2017. Los Angeles County, CA, saw an increase from 11 deaths in 2007, with numbers climbing to 28, 20, 22, 24, 12, 25 in the years 2010 to 2015. San Diego County, CA, saw similar increases from 4 deaths in 2007 to 12 in 2016. Pennsylvania (17 counties) identified 3 Duster deaths in 2008,

while 19 were identified in 2017. Virginia also only identified 6 deaths in 2007, yet that number climbed to 16, 18, and 14 in the years 2016 thru 2018. Every geographic area investigated in this data collection demonstrated an extreme climb in Duster inhalant deaths during this period of time. These numbers don't appear to be decreasing at any consistent rate regardless of the geographic location (Chart – Inhalant Deaths – VA, FL, CA, PA, TX). If this same trend was mathematically extrapolated across all states in the U.S., you would find that several thousand individuals have died from Duster inhaling in just the 2007-2018/19 decade.

Difluoroethane Inhalant Death Totals 2007 - 2019

VA, FL, CA (Los Angeles, San Diego Counties), PA (17 Counties), TX (Travis County)

Year	States						Total
	VA	FL	CA - LA	CA - SD	PA	TX	
2007	2	8	3	3	NA	-	**16**
2008	4	14	3	2	1	-	**24**
2009	6	12	5	4	2	1	**30**
2010	5	22	7	3	9	2	**48**
2011	10	33	5	4	2	-	**54**
2012	3	34	8	5	1	-	**51**
2013	4	20	8	6	-	-	**38**
2014	12	28	4	8	7	-	**59**
2015	9	42	8	3	3	1	**66**
2016	19	46	6	11	6	1	**89**
2017	15	52	9	7	11	3	**97**
2018	14	41	7	NA	8	1	**71**
2019	NA	NA	2	NA	3	NA	**5**
Total	**103**	**352**	**75**	**56**	**53**	**9**	**648**

NA - Not Available

A review of this available data in relation to age, gender and ethnicity reveals that individuals under the age of 19 years old are still dying from inhalant use, specifically Dusters. The majority of the 648 Duster inhalant deaths are Caucasian males in their 20s

and 30s, with the number of Hispanics and female users increasing rapidly. There are Duster deaths documented for individuals beyond 50 years of age. Specific age data (Duster only) was only available for Los Angeles and San Diego Counties in California, although Virginia and Pennsylvania did identify several deaths under the age of 19 years old for "inhalants" overall.

Families United Against Inhalant Abuse

Difluoroethane Deaths Los Angeles County by Gender and Age - 2007-2019 (Thru Oct. 19)

Year	Male Age (yrs)						Female Age (yrs)						
	10-19	20-29	30-39	40-49	50+	Male Total	10-19	20-29	30-39	40-49	50+	Female Total	Grand Total
2007	-	1	-	-	-	1	-	1	1	-	-	2	3
2008	-	1	1	-	-	2	-	-	1	-	-	1	3
2009	-	3	1	1	-	5	-	-	-	-	-	0	5
2010	-	3	1	-	1	5	1	-	1	-	-	2	7
2011	-	2	1	1	-	4	-	1	-	-	-	1	5
2012	-	2	2	1	-	5	1	1	-	1	-	3	8
2013	1	2	-	-	1	4	1	1	1	1	-	4	8
2014	1	-	2	-	1	4	-	-	-	-	-	0	4
2015	-	1	4	-	1	6	1	-	-	-	1	2	8
2016	-	-	3	-	-	3	1	2	-	-	-	3	6
2017	-	2	3	1	1	7	-	2	-	-	-	2	9
2018	1	2	1	-	-	4	-	2	1	-	-	3	7
2019	-	-	1	-	-	1	-	1	-	-	-	1	2
Total	3	19	20	4	5	51	5	11	5	2	1	24	75

Difluoroethane Los Angeles County by Ethnicity 2007-2019 (Thru Oct. 19)

Year	Ethnicity					Total
	Cauc.	Hisp.	Black	Asian	API	
2007	1	2	-	-	-	3
2008	1	-	-	-	-	1
2009	2	3	-	-	-	5
2010	4	3				7
2011	3	2				5
2012	5	2	1			8
2013	3	5	-	-	-	8
2014	1	2			1	4
2015	6	1	1	-	-	8
2016	2	2	2			6
2017	3	6	-	-	-	9
2018	2	4	1			7
2019	2	-	-	-	-	2
Total	39	30	5	0	1	75

Difluoroethane Deaths San Diego County by Gender and Age - 2007-2017													
Year	Male Age (yrs)						Female Age (yrs)						
	10-19	20-29	30-39	40-49	50+	Male Total	10-19	20-29	30-39	40-49	50+	Female Total	Grand Total
2007	-	1	2	-	-	3	-	-	-	-	-	0	3
2008	-	2	-	-	-	2	-	-	-	-	-	0	2
2009	-	1	-	1	-	2	-	1	-	1	-	2	4
2010	-	1	1	1	-	3	-	-	-	-	-	0	3
2011	-	1	1	1	-	3	-	1	-	-	-	1	4
2012	-	-	2	1	-	3	-	1	-	1	-	2	5
2013	-	1	-	2	1	4	-	-	1	1	-	2	6
2014	-	-	4	1	1	6	-	-	-	2	-	2	8
2015	-	1	2	-	-	3	-	-	-	-	-	0	3
2016	-	2	3	1	2	8	-	1	-	2	-	3	11
2017	-	-	3	2	1	6	-	-	-	1	-	1	7
Total	0	10	18	10	5	43	0	4	1	8	0	13	56

Difluoroethane Deaths San Diego County by Ethnicity 2007-2017						
Year	Ethnicity					Total
	Cauc.	Hisp.	Black	Asian	Nat Am	
2007	3	-	-	-	-	3
2008	1	-	1	-	-	2
2009	4	-	-	-	-	4
2010	3	-	-	-	-	3
2011	4	-	-	-	-	4
2012	5	-	-	-	-	5
2013	5	1	-	-	-	6
2014	6	1	-	-	1	8
2015	3	-	-	-	-	3
2016	9	1	1	-	-	11
2017	7	-	-	-	-	7
Total	50	3	2	0	1	56

The National Poison Data System (NPDS) collects information from 55 Poison Centers throughout the U.S. and documents the number of calls annually. This documentation includes the reasons for the emergency call, the eventual outcome of the individual involved, and weather the individual was treated or died. A study published in "*Pediatrics,"* May 2010, reviewed data from calls dealing with inhalants from 1993-2008. In this study, teen males 12-17 were most likely to use inhalants and the use of

"propellants" was increasing rapidly. Dusters were the 4th most popular inhalant being used at that time (Marsolek, White, and Litovitz, 2010).

When Families United Against Inhalant Abuse analyzed NPDS Annual Report call data for 2007-2019, they found an extreme increase in Duster deaths during this time period. There were only 5 Duster inhalant deaths in 2007, while numbers quickly rose to 25, 25, 20, 14, 18, 24, 35, 23, and 23 in the years 2011 to 2019. From these 244 deaths, 28 were individuals under the age of 19 years old, 74 were in their 20s, 76 were in their 30s, and the remainder were 40 and older. Additionally, hydrocarbon exposure calls increased from 586 in 1983 to over 50 thousand currently. Hydrocarbons have remained for decades in the top 25 products involved in deaths of individuals of all ages in the U.S.

National Poison Control Center - Difluroethane Death Data 2006-2019

Year	Male Age (yrs)							Female Age (yrs)							
	10-19	20-29	30-39	40-49	50-59	60+	Male Total	10-19	20-29	30-39	40-49	50-59	60+	Female Total	Grand Total
2006	2	2	1	-	-	1	6	2	-	-	-	-	-	2	8
2007	1	1	1	-	-	-	3	1	1	-	-	-	-	2	5
2008	4	2	2	-	1	-	9	-	1	1	-	-	-	2	11
2009	-	1	-	-	-	1	2	-	1	1	-	-	-	2	4
2010	1	4	-	-	-	-	5	1	-	1	1	1	-	4	9
2011	2	8	4	4	-	1	19	3	3	-	-	-	-	6	25
2012	2	3	7	5	1	1	19	1	1	3	1	-	-	6	25
2013	-	2	1	2	1	-	6	2	4	7	1	-	-	14	20
2014	-	5	1	3	1	-	10	-	1	1	1	1	-	4	14
2015	-	4	6	1	2	-	13	-	1	2	1	-	1	5	18
2016	-	4	5	5	1	-	15	1	3	2	2	-	1	9	24
2017	2	5	14	2	1	-	24	-	2	4	3	2	-	11	35
2018	1	5	6	3	-	-	15	-	4	1	2	1	-	8	23
2019	1	2	5	5	2	3	18	1	4	-	-	-	-	5	23
Total	16	48	53	30	10	7	164	12	26	23	12	5	2	80	244

After reviewing all of the data provided thus far, the following conclusions can be drawn: (1) Duster inhalation in the U.S. is a "chronic problem;" (2) Individuals of all ages, genders, ethnicities, and education and socioeconomic levels are involved in the inhalant use of Duster and are dying in large numbers throughout the U.S.; (3) There is definitely "unreasonable" risk of physical damage and death due to the inhalant use of Duster products; and (4) current interventions (legislation, retail practices, manufacturer design) have been ineffective in resolving this problem.

Actions of Interested Parties

Education

Inhalant education has been in place since 1980 through several non-profit organizations such as Inhalant.org, National Inhalant Prevention Coalition, the Alliance for Consumer Education, Drug Free World, numerous school districts, and several smaller groups operating within individual states. The Consumer Product Safety Commission created "*A Parents' Guide To Preventing Inhalant Abuse" brochure in 2001,* which is available online, along with several publications on teen substance abuse and Youth National Survey Results on the National Institute on Drug Abuse website. Although the topic of inhalant use is not as prevalent as that of other illicit drugs, it is and has been available for decades.

Is CPSC Rulemaking Necessary?

Industry Effectiveness

Consumer Product Safety Commission Rulemaking is definitely necessary in order to reduce the risk of injury from the inhalant use of Dusters. The compressed gas industry has had half a century to effectively deal with this problem and they have chosen to do nothing other than offer a "fraudulent bitterant." It is foreseeable, that if left to their own means, they will never address this problem. They continually emphasize that Dusters are only one of over 1400 inhalant products, so why pick on Dusters? The answer is simple, they are the PRIMARY inhalant being used throughout the U.S., and that use is causing thousands of deaths. The data provided by FUAIA which has been discussed in this document, demonstrates that Duster inhaling "has," "currently is," and will "continue to be" a serious problem in this country if something is not done to address this dangerous practice.

Families United Against Inhalant Abuse has provided three actions that it believes would make an impact and decrease Duster inhalant use and the associated deaths. A combination of any or all suggestions would absolutely make a difference!

The FUAIAs first suggestion for addressing Duster inhalant use would be to require manufacturers to add an aversive (bitterant other than Denatonium Benzoate) to all Duster cans at a level of 30-40 ppm. There injection technology must be improved to ensure that the bitterant actually gets into the can and will also appear in the spray at the designated level. These cans must be tested annually by an outside agency as a means of quality control. Allowing these manufactures to "self-monitor" would only continue the fraudulent practices of the past.

A second suggestion would be to require retailers to monitor and limit individuals from continually purchasing multiple cans of Duster from their stores during a designated (one month) period of time. Using a person's ID, this action can be easily implemented with the use of a purchase/inventory program which most retail chains already have.

On average, one can of Duster when used as intended, will last an individual up to 6 months. Even professional photographers are said to use at most, 2 cans per month. To offset the reduced sales of Duster cans, retailers can increase the cost per can to $9.95 or more. This retail strategy was used with the cold medicine Sudafed when these tablets were being included as an ingredient of methamphetamines. This form of purchase regulation was extremely successful in many locals throughout the country.

The last suggestion for dealing with Duster inhalant use would be to place a "much stronger" warning on the can. An example of this warning could be: "**DANGER: DEATH – This product can kill you if you breath it.**" The warning text could be a full 50% of the front panel in bright red letters with a graphic of a skull and crossbones. As previously stated, the weak warnings seen often on Dusters seem designed to keep companies "safe" when someone misuses their product, not really to prevent someone from doing so (Appendix B – Dust-Off and Ultra Duster can photos). Numerous studies have investigated the relationship between warning design and human factors, concluding that warnings are relatively ineffective (Arndt, Ayres, McCarthy, Schmidt, Wood and Young, 1998; Ayres, 2004; Ayres, Wood, Schmidt and McCarthy, 1998; Green, 2013).

In conclusion, without banning Duster products altogether, the CPSC definitely needs to enact rulemaking to address the dangerous inhalant use. Without this action being taken, the inhalant use of Dusters and the associated deaths will continue at a steady rate.

Respectfully Submitted:

Claudia F. Dimit

Claudia F. Dimit, Ph.D., Board President

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Appendix A

News Releases

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vii. Boca Raton Police: *Boca Raton Man Inhales Cleaning Duster in Uber*, Driver Calls Cops; September 15, 2020. https://bocanewsnow.com/2020/09/15/police-boca-raton-man-inhales-cleaning-duster-in-uber-driver-calls-cops/.

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ix. Morgan Cook, North County Times; February 25, 2012. *Region: Residents' Sudden Deaths Linked to Abuse of 'Air Duster' Products, Officials Say*. https://www.sandiegouniontribune.com/sdut-region-residents-sudden-deaths-linked-to-abuse-of-2012feb25-story.html

x. Falcon Safety Products Bitterant Technology News Release (2006); *New Dust-Off Formula Deters Inhalant Abuse*. (document follows)

For Immediate Release

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New Dust-Off@Formula Deters Inhalant Abuse

Proactive efforts reflect Falcon's dedication to making a difference and saving lives.

Branchburg, NJ (October 23 rd , 2006) — Falcon Safety Products , manufacturer of the Dust-Off@ brand of consumer electronics cleaning products, today introduced a new version of its industry leading Dust-Off compressed-gas duster. While entirely safe when used as directed, compressed-gas dusters are one of many aerosol products too often abused by young adults searching for a cheap and sometimes deadly high. In an attempt to discourage this dangerous practice of inhalant abuse, Falcon developed a new formulation for its dusters, incorporating an additive that makes the contents of the -k (pan extremely unpalatable to those who attempt to abuse them. The additive was developed to have no adverse effects with normal, recommended use.

"This new formulation of Dust-Off has a significant meaning to me and my family," said Jeff Williams, an East Cleveland Police Officer. "Over a year ago, we lost our son Kyle to inhalant abuse - he died inhaling the contents of a Dust-Off compressed-gas duster. I couldn't be more pleased with the way Falcon has faced the issue of inhalant abuse head on and how as a company, it has dedicated itself to bringing a safer form of its product to market. I understand that Falcon began this project a few years ago and that adding the deterrent to Dust-Off was a long and difficult process, but their renewed commitment to finalizing the project in light of Kyle's death reflects the level of care they have for consumer safety and that should not go unnoticed. While the deterrent isn't a solution to inhalant abuse by itself, it's another important cog in the wheel. Together with increased education, it will ultimately make a huge difference in fighting inhalant abuse in the long run," added Officer Williams.

Commonly referred to as "huffing," "bagging," or "dusting," inhalant abuse is an extremely dangerous and potentially fatal practice, and shockingly, the incidence of the abuse is on the rise among young Americans. Falcon Safety Products is deeply concerned about the issue and maintains an unwavering commitment to consumer safety. For over 20 years, Falcon has taken numerous, proactive steps in communicating the dangers of inhalant abuse and promoting the proper use of its products.

xi. DuPont's Bitterant Technology News Release (2012); *Dupont Patented Technology Discourages Duster Inhalation Abuse.* (document follows)

DuPont Patented Technology Discourages Duster Inhalation Abuse

Wilmington, Del., March 23, 2012

Bittered dusting technology, available by license, is being introduced during the 20th annual National Inhalants and Poison Awareness Week

DuPont today announced a patented new technology to discourage inhalation abuse of propellant products known as "dusters. " Dusters are used to blow dust and contaminants from sensitive surfaces such as electronic components.

"The new technology is based on an additive that can enhance the safety of duster products by deterring abusers from concentrating and inhaling them, " said Jane Austin, global business and market director, DuPont Fluorochemicals. "DuPont worked to identify a formulation that would deter abuse while maintaining consumer acceptance and overall product safety."

This technology is being made available through licensing from DuPont, a leading science company with safety as a core value. The patent covers all aerosol duster products that are made, sold or used in the United States utilizing this technology. For more information on licensing of this new technology, contact Esther Rosenberg at DuPont (esther.q.rosenberg@usa.dupont.com).

DuPont believes in the importance of education on the consequences of inhalation product abuse, and we support the Alliance for Consumer Education (ACE) Inhalation Abuse Preventlon Programs (http://www.inhalant.orq/). We are introducing this new technology during the 20th annual National Inhalants and Poison Awareness Week (http://inhaIant-infp.>logspot.com/2012/03/national-inhaIants• and-poisons. html).

DuPont (NYSE: DD) has been bringing world-class science and engineering to the global marketplace in the form of innovative products, materials, and services since 1802. The company believes that by collaborating with customers, governments, NGOs, and thought leaders we can help find solutions to such global challenges as providing enough healthy food for people everywhere, decreasing dependence on fossil fuels, and protecting life and the environment. For additional information about DuPont and its commitment to inclusive innovation, please visit http: / /www.dupont.com.

xii. ACE's Inhalant Abuse Report Blog (document follows)

Thursday, April 19, 2018

Michigan Woman Arrested for Huffing Dust Cleaner in Costco

Via: WTMJ- TV Milwaukee

Bloomfield Township, MI - An 18-year-old woman was arrested for theft and inhalant abuse in a Costco in Bloomfield Township, Michigan. The manager found the woman huffing a can of dust cleaner in the woman's bathroom. The woman later confessed to the theft of the dust cleaner and was arrested by local police.

Tuesday, May 1, 2018

Arkansas Man Arrested for Huffing

Via: Arkansas Online

Little Rock, AK - A man was arrested for inhaling aerosols after local police found him standing out of his vehicle's sunroof. The police found a can of air duster in his vehicle.

Wednesday, May 2, 2018

Wyoming Woman Arrested for Huffing

Via: Oil City News

Casper, WY - A woman was arrested after police received reports about a woman sucking air from air dusters and laying in the dirt. The woman initially denied using the aerosol and gave police a fake name but authorities were able correctly identify her since there was a local warrant for her arrest. She then confessed to inhaling the air duster and was arrested.

Thursday, May 17, 2018

Ohio Man Arrested for Huffing

Via: WKYC 3

Strongsville, OH - A man was found huffing computer duster in a Walmart by local police and later arrested. When police arrived on the scene, the man pulled out a knife and held it to his throat prompting officers to tase him to avoid injury. He was later taken to the hospital and remains under police guard.

Monday, May 21, 2018

South Carolina Man Arrested for Huffing

Via: Myrtle Beach Online

Myrtle Beach, SC- A 60-year-old man was arrested for huffing dust cleaner after police responded to reports of a disorderly person. The police found eight cans of dust cleaner in his car.

Friday, May 25, 2018

New Mexico Man Kills Woman While Driving and Huffing

Via: Santa Fe New Mexican

Farmington, NM - A 23-year-old man is accused of killing a 76-year-old woman after driving while under the influence of air duster. The man inhaled from an air duster two to three times before driving off and side swiping a mini-van then driving into the victims yard striking her. He then proceeded to drive through a brick fence and hit a home three houses down before stopping. When questioned the man said he blacked out after inhaling the air duster and woke up after the crash. Despite passing the sobriety test the man was acting erratically according to officials.

Tuesday, May 22, 2018

South Dakota Mother Arrested for Driving and Huffing

Via: The Public Opinion

Watertown, SC - A 24-year-woman was found by police passed out at the wheel from inhaling dust cleaner. Police responded to reports of a car driving in the wrong direction and found the woman with her child in the back seat of the car. She was charged with ingesting an intoxicant and child abuse since her child was 4-years-old.

Thursday, May 31, 2018

Indiana Man Killed from Driving and Huffing

Via: Fox 59

Howard County, IN - In early May, a 27-year-old man was killed after driving into oncoming traffic and hitting a semi before being ejected from the car. Officers found a can of computer duster in the victims car but the recent coroner's report determined that there was 1,1-Difluoroethane, a chemical found in most computer cleaners, in his system.

Monday, June 4, 2018

Florida Man Arrested for Huffing and Driving

Via: News 4 JAX

Gainsville, FL - A 33-year-old man was arrested for huffing and driving after officials found him slumped over the wheel of his car while holding a can of air duster. Officials knocked on the window of his car but the man proceeded to wake up, inhale from the can, and drive off before he hit two vehicles, a mailbox and finally came to a stop. They were then able to arrest him for property damage, driving without a license, inhaling harmful chemicals and attempting to flee police.

Tuesday, June 5, 2018

Washington Man Arrested for Huffing

Via: The Chronicle

Rochester, WA - A man was arrested for huffing canned air after police responded to reports of a man taking hits from the can and appearing inebriated.

Thursday, June 14, 2018

Michigan Man Huffs Before Hit-and-Run

Via: 9 and 10 News

Alpena, MI - A man has been accused of huffing before driving and hitting a person. Police were called to the scene and eventually found him and arrested him. Authorities are now using the incident to educate the public on the dangers of inhalant abuse and urging business owners to be mindful of large purchases of items that can be inhaled such as air dusters and aerosols.

Wednesday, June 27, 2018

Arkansas Police Warn Against Huffing After Three Weekend Arrests

Via: KAIT 8

Batesville, AR - There were three huffing-related incidences over the weekend causing alarm among law enforcement officials. The first arrest came when police responded to reports of a man huffing air duster and driving erratically. The driver denied huffing air duster but police found multiple empty cans in his car. The second arrest happened after a woman crashed into another vehicle then drove away. When police caught up to the woman she said she was looking for help but police found a recently used can of air duster in her car prompting her to confessing to huffing and driving. Then police cited a 13-year-old boy for huffing outside of a Walmart. The boy confessed saying he did it because friends told him it would make him feel good.

Wednesday, July 11, 2018

Pennsylvania Woman Huffs Outside of Five Below

Via: Fox 43

Lancaster, PA - A 29-year-old woman was found unconscious outside of a Five Below surrounded by many air duster cans. The police were called and when she became conscious she tried inhaling from one of the cans again. The woman was charged with drunkenness and illegal use of inhalants.

Wednesday, July 11, 2018

Minnesota Man Charged After Huffing and Driving

Via: SC Times

St. Cloud, MN - A 28-year-old man, Charlie Ray Barnett, has been charged with two counts of criminal vehicular homicide and one count of violating a domestic abuse no contact order. Police were called to the scene to respond to complaints of someone driving erratically. According to witnesses he was driving over the speed limit and made no effort to slow down to prevent the crash. Barnett was driving and crossed into the over lane hitting a vehicle with two people killing both. Witnesses say that Barnett acted strange after the crash and had bloodshot eyes and police found cans of dust cleaner in the car. The car Barnett was driving belonged to a woman who had filed a no contact order against him. Barnett violated the order earlier on the day of the accident and stole the woman's keys. Barnett is scheduled to appear in court on July 23.

Appendix B

Product Photos

i. Dust-Off – Front of can; August 2020.

ii. Dust-Off – Back of can; August 2020.

iii. Ultra Duster – Front of can; August 2020.

iv. Ultra Duster – Back of can; August 2020.