

# PRESENTATION BY ISABELLE HAINS and ANA ACEVEDO VAN ANGELS <u>www.VanAngels.ca</u> <u>info@VanAngels.ca</u>

To the New Brunswick Energy and Utilities Board March 12, 2012

**Regarding** Application for a Permit by Advanced Shuttle Services Ltd. In 1984 - 3 hockey players and a volunteer die in a 15-passenger van incident in Amherst, N.S.

1990 - 7 tree planters die in a 15-passenger van rollover north east of Edmonton, Alberta.

2003 - 1 farm worker dies in a 15-passenger van rollover in Langley, B.C.

2004 - 2 high school basketball players die in a 15-passenger van incident near Strathmore, Alberta.

2007 - 3 farm workers die in a 15-passenger van incident in Abbotsford, B.C.

2008 - 7 high school basketball players and the coach's wife die in a 15-passenger van collision in Bathurst, N.B.

2008 - 1 young man dies in a 15-passenger van rollover near Brandon, Manitoba.

2011 - 1 poultry worker dies in a 15-passenger van rollover near Trois Riviere, Quebec.

2011 - 5 poultry workers die in a 15-passenger van collision in Bertierville, Quebec.

2011 - 1 poultry worker dies in a 15-passenger van rollover near Montmagny, Quebec.

2012 - 10 poultry workers and a driver in the other vehicle die in a 15-passenger van collision in Hampstead, Ontario.

The common denominator in all these road tragedies and hundreds more, is the defective design, high centre of gravity and dangerous handling characteristics of the 15-passenger van.

My name is Isabelle Hains and I am here today with Ana Acevedo on behalf of the Van Angels group to object to the application by Advanced Shuttle Services Ltd. for a permit to use 15-passenger vans to transport passengers between New Brunswick and Prince Edward Island.

Van Angels is dedicated to educating, raising public awareness and advocating for regulatory changes in the use of 15-passenger vans. We believe that 15-passenger vans are 'death traps' that were originally designed to transport cargo and that they should never be used to transport human beings. Our membership includes family and friends of the victims of 15-passenger van tragedies from across Canada, including Stella Gurr of Nanaimo, British Columbia, who lost her son Michael in September 2008. Our members also include transportation safety experts and advocates, professional school bus drivers, as well as union and industry representatives.

In this brief presentation we will share with you research, studies and data which supports our claim that 15-passenger vans are unfit for human transportation. We believe that safety concerns with the inherent design and engineering flaws of 15-passenger vans will convince the New Brunswick Energy and Utilities Board to decline a permit to Advanced Shuttle Services Ltd. to use 15-passenger vans to transport passengers in NB and PEI.

Like many other Canadians, Ana and I knew nothing about the serious safety concerns associated with 15-passenger vans until our 17-year old sons, Daniel Hains and Javier Acevedo, were killed in a horrific collision that took the lives of five other members of the Bathurst High School Phantoms Basketball team and the coach's wife on January 12, 2008.

Following the Bathurst tragedy the province of New Brunswick banned 15-passenger vans for school transportation. Meantime, our Van Angels group petitioned for a Coroner's Inquest that resulted in 24 recommendations, which included banning 15-passenger vans for student transportation in Canadian schools. (See link below for a list of the Coroners Jury recommendations). Fifteen passenger vans are also currently banned for student transportation in the provinces of Nova Scotia and Quebec.

## http://www.gnb.ca/0000/publications/comm/ResponsesToCoronersInquestRecommendati ons.pdf

Over the course of the last four years we have educated ourselves about the dangerous use of 15-passenger vans in Canada and the United States. What follows are highlights of our research which clearly show that there is credible, scientific evidence which supports our claim that 15-passenger vans are unsafe and should never be used to transport humans.

In 2001, the National Highway Transportation Safety Administration (NHTSA) in the United States released results of its study, the Rollover Propensity of 15 Passenger Vans/Analysis and revealed a dramatic difference in rollover ratios depending on the number of occupants in these vans. The rollover ratio of 15-passenger vans with less than

5 people was 12.3% (12.3 rollovers per 100). The ratio rose to 20.8% with 5-9 occupants and increased to 29.1% with 10-15 occupants. It was thus determined that the rollover ratio for 15-passenger vans with 10 or more occupants is almost 3 times that of a van with less than 10. (Refer to page 3 of the study).

http://www-nrd.nhtsa.dot.gov/Pubs/01-030.pdf

January 19, 2011 -U.S. statistical data from 1982 to 2009 shows an increase in Fatal Rollovers of 15-Passenger Vans.

http://quality-control.us/15\_passenger\_vans.html

April 2002 CBS 60 Minutes II airs a story on the safety concerns of 15-passenger vans, particularly rollovers.

http://vimeo.com/618459

Safety concerns involving 15-passenger vans prompted the NHTSA to issue several advisories commencing in 2001.

April 09, 2001, a NHTSA Consumer Advisory warns about increase rollover risk under certain conditions.

http://www.biology.ualberta.ca/facilities/safety/uploads/doc/DOT\_April09-01.htm

April 15, 2002 NHTSA Repeats Rollover Warning to Users of 15-Passenger Vans.

http://www.nhtsa.gov/nhtsa/announce/press/pressdisplay.cfm?year=2002&filename=pr27 -02.html

May 2005, a NHTSA 12 and 15-passenger van tire pressure study is released.

http://www-nrd.nhtsa.dot.gov/Pubs/809846.PDF

May 26, 2005 NHTSA restates rollover warning for users of 15-passenger vans.

http://www.nhtsa.gov/About+NHTSA/Press+Releases/2005/NHTSA+Restates+Rollover +Warning+For+Users+of+15-Passenger+Vans

May 20, 2009 NHTSA restates rollover warning for 15-passenger van users.

http://www.nhtsa.gov/About+NHTSA/Press+Releases/2009/Consumer+Advisory:+Feder al+Government+Restates+Rollover+Warning+for+15-Passenger+Vans+Users

### October 14, 2010 NHTSA Reissues 15-passenger van safety caution.

## http://www.nhtsa.gov/CA/10-14-2010

August 2008, Transport Canada releases a fact sheet on 12-15 passenger large vans.

http://www.tc.gc.ca/eng/roadsafety/tp-tp2436-rs200808-menu-202.htm

It is visually obvious that 15-passenger vans are tall, heavy vehicles with a narrow track width and short wheelbase regardless of make or model. For example, the GM Express has a longer wheelbase (3940 mm) than a Ford E-350 (3520 mm) but the height of the center of gravity (CG) of the GM is higher (811 mm) than the FORD (804 mm). A 5 foot extended back end on the FORD E-350 and a large storage container often added on the back fender of the GM models adds additional weight past the rear wheels on both vehicles. All of these factors affect stability, which is then further compromised by the vans' seating configuration, which places the bulk of the passenger weight above the vans CG. (NHTSA found that fully loading a 2000 Ford E350 XLT further increased its already high CG by another 4 inches).

As the number of passengers increases, the CG moves upward and then rearward putting a high concentration of weight over the rear axle. This can create rear tire saturation and loss of traction causing sideway slide and 'fishtailing'. When this occurs, the driver loses control because the van is no longer reacting in a predictable way to the steering input. In a split second emergency situation, the driver is faced with pulling off an extremely difficult and precise countersteer manoeuver in an attempt to regain control. Too much or too little correction can in itself lead to a rollover (very common in single vehicle incidents) or based on the laws of physics, the vehicle will continue in a straight line right towards whatever the driver is attempting to avoid. Difficulties in handling and stability are characteristics of the 15-passenger van. (See presentation by Bryan Murphy of CUPE #606, Vancouver Island Occupational and Health Representative, Nanaimo, BC).

#### http://www.vanangels.ca/documents/dangerous-use-15-passenger-vans.pdf

Once a collision or rollover occurs there is the second stage event that involves the ability of the vans design to provide a crashworthy occupant compartment. The structural integrity of any passenger vehicle is paramount in saving lives. Currently, the Canadian Motor Vehicle Safety Standard (CMVSS) #216 (roof crush resistance) is optional to auto manufacturers producing vehicles over the Gross Vehicle Weight Rating (GVWR) of 2722 kg. The GVWR of a GM Express is 4355 kg and the GVWR for a FORD E-350 is 4128 kg and basically this means that the 15-passenger vans have never had to meet even the minimum roof crush resistance safety standard #216. The Technical Standard Document (TSD) #216 is conducted with a plate on the roof of the test vehicle in a downward vertical movement with pressure of 1.5 X GVWR.

For many years, engineers and researchers worldwide have recommended that the 1.5 X GVWR is not sufficient to provide adequate passenger protection and safety. This current

standard expires on January 1, 2014 at which time a phase in period will begin with an increase from 1.5 to 3.0 X GVWR for all vehicles less than 2722 kg. It will become mandatory on January 1, 2016 and vehicles weighting more than 2722 kg but less than 4536 kg will only increase to 1.5 X GVWR. This future increase will once again place the 15-passenger van's roof crush resistance less than it is for a regular passenger car.

### http://www.tc.gc.ca/eng/roadsafety/safevehicles-mvstm\_tsd-tsd-2160rev1\_e-1072.htm

http://www.tc.gc.ca/media/documents/roadsafety/tp14006e.pdf (refer to page 30, Table 12: Canada Motor Vehicle Safety Standards Applicable to Bus Occupant Protection)

A properly designed vehicle should be built with a passenger compartment that provides a reasonable chance of survival because accidents are a foreseeable possibility. Besides instability and insufficient roof crush resistance, there are other defective design problems with the 15-passenger van that exposes occupants to further injury or death after the initial event of the rollover or collision. Since laminated glass is not a mandatory requirement for the side and back windows of 15-passenger vans, when the tempered glass is broken it leaves an opening large enough for a human body to be partially and/or fully ejected. Although laminated glass is preferable, any sway, tip-up, rollover or collision is considered a very dangerous situation and can lead to loss of any type of window glazing resulting in a large ejection portal. The latest GM Express now includes laminated side windows on the 4th and 5th rows and side air bag curtains on the first three rows. But regardless of these additions, the van's physical structure still leaves this vehicle prone to being top heavy and difficult to handle in emergency manoeuvres.

All 15-passenger vans lack reinforced sides and roof, plus an unobstructed emergency back exit. The rear doors are typically blocked by the back seats or cargo. In addition, unless custom ordered, the 15-passenger van does not have dual rear tires which research has shown would help with instability and rear tire blow out. The Insurance Institute of Highway Safety (IIHS) website provides up to date information on 15-passenger vans.

#### http://www.iihs.org/research/qanda/fifteen\_passenger.html

The safe transportation of small groups does not need to be an issue. There are alternate vehicles available that are built to yellow school bus standards: the new Canadian Standard Association (CSA) D-270 Multi-function Activity Bus (MFAB) and American Multi-Function School Activity Bus (MFSAB). These buses are manufactured to meet CMVSS #220 (Rollover Protection), #221 (School Bus Body Joint Strength) and #222 (School Bus Passenger Seating and Crash Protection) and US Federal Motor Vehicle Safety Standard (FMVSS) #220, #221, #222.

http://www.csa.ca/cm/ca/en/search/article/standard-to-transport-children-for-schoolrelated-events View the manufacture of yellow school buses and D-270 MFAB.

http://www.girardin.com/MFSAB\_2.html

Rollover Protection (CMVSS #220)

http://www.tc.gc.ca/eng/acts-regulations/regulations-crc-c1038-sch-iv-220.htm

School Bus Body Joint Strength (CMVSS #221)

http://www.tc.gc.ca/eng/acts-regulations/regulations-crc-c1038-sch-iv-221.htm

School Bus Passenger Seating and Crash Protection (CMVSS #222)

http://www.tc.gc.ca/eng/acts-regulations/regulations-crc-c1038-sch-iv-222.htm

Our Van Angels group has worked tirelessly for the safe transportation of students and small passenger groups. Our objections are based on the facts and over four years of research on 15-passenger vans (<u>www.vanangels.ca</u>). We have pressured and managed to get Transport Canada to conduct a safety review of these vehicles. We have recommended alternate vehicle choices, supported the introduction of a new definition of the MFAB D-270 under the Canadian Motor Vehicle Safety Regulations (CMVSR) and fought for stricter regulatory guidelines and enforcement.

We fully recognize that many segments of our society, besides students, are seriously impacted by the dangerous design of the 15-passenger van and we want to make sure they too are safe. For example: daycares, seniors, forestry and agricultural workers, the disabled, church groups, youth organizations, sport teams, shuttle services etc. are all dependent on small group transport.

We firmly believe that all passengers requiring a small group bus service should expect nothing less than the safest mode of transport available. It took the tragic deaths of seven Bathurst High School students and the coach's wife to ban the 15-passenger van for student transportation in N.B. Are the lives of other people less valuable? A life is precious at any age.

The New Brunswick Energy and Utilities Board (NBEUB) has the power and responsibility to provide safe transportation for its citizens. Has the government learned nothing from the Bathurst tragedy? Have the death of our boys Daniel and Javier been in vain?

There are safer alternative vehicles available - the CSA D-270 MFAB and the MFSAB. If the NBEUB decides to grant this permit they will be taking a step backwards. In 2009 the same students who were protected by the banning of the 15-passenger vans are now adults who are being targeted by this application for a permit to transport passengers in New Brunswick and Prince Edward Island. Shouldn't they be given the same level of safe transportation? This shuttle services fleet will be on the highway, going highway speeds, in all kinds of weather, with other larger and heavier vehicles. Would you not want to be riding in the safest vehicle possible?

We believe that this application for a permit to use 15-passenger vans to transport passengers in NB and PEI represents a turning point in Canadian transportation history. In this hearing today we have an opportunity to shape the future of safe passenger transportation and for New Brunswick to become a symbol of the new direction our country must take.

The decision is in your hands: we challenge the NB EUB to have the courage to make a stand here in New Brunswick against the dangerous use of 15-passenger vans by rejecting this application for a permit by Advanced Shuttle Services Ltd.

Isabelle Hains and Ana Acevedo Van Angels