Remote Not In Traffic Surveillance Carbon Monoxide Poisoning Investigation
Dynamic Science, Inc. (DSI), Case Number DS09011
1983 Oldsmobile Cutlass Supreme
California
December 2008

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

Technical Report Documentation Page

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16. Abstract

This incident focused on the circumstances surrounding the deaths of three female occupants in a parked 1983 Oldsmobile Cutlass Supreme 4-door sedan. The vehicle had been parked in a parking lot with its engine running for up to 14-1/2 hours. The area was snow covered. At some point between 2200 hours and 1230 hours the following day in December 2008, all three females died of accidental carbon monoxide (CO) poisoning.

17. Key Words	18. Distribution Statement		
Not In Traffic Surveillance (NITS), fatality, carbon monoxide poisoning			
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Dynamic Science, Inc.
Crash Investigation
Case Number: DS09011
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Background

This incident focused on the circumstances surrounding the deaths of three females in a parked 1983 Oldsmobile Cutlass Supreme 4-door sedan (**Figure 1**). The vehicle had been parked in a parking lot with its engine running for up to 14-1/2 hours. The area was snow covered. At some point between 2200 hours and 1230 hours the following day in December 2008, all three females died of accidental carbon monoxide (CO) poisoning.

Figure 1. Exemplar view of 1983 Cutlass Supreme

This incident was investigated by the county coroner's office. The office generated a coroner's record and a supplemental investigation report. This incident was not reported to the state as a traffic fatality.

This remote Not in Traffic Surveillance (NITS) CO poisoning investigation was identified by the National Highway Traffic Safety Administration (NHTSA) from a review of an internet news article. The article reported that three women were found dead in a vehicle parked near a ski resort and law enforcement officials suspected that they were victims of accidental CO poisoning. On February 25, 2009 DSI was sent the news article with instructions to obtain cooperation. The local police jurisdiction was contacted and they indicated that any reports on the incident would be generated by the coroner's office. The coroner was contacted on February 25, 2009 and a copy of the coroner's supplemental investigation was requested for each of the victims. On March 3, 2009 DSI obtained the investigation reports. The case was assigned on March 4, 2009. The following information was obtained from the internet news article and the investigation reports.

Summary

Incident Site

The incident occurred between 2200 hours and 1230 hours the following day in December 2008. According to news accounts, the temperatures were between -7 degrees C (20 degrees F) and -1 degrees C (30 degrees F). The winds were generally calm and there were reports that it was snowing. The police reported that the vehicle was covered with new fallen snow. The incident occurred in a parking lot for employee housing at a ski resort.

Incident

The Oldsmobile had been parked in a parking lot near a ski resort. The vehicle was parked in the first parking space in the lot, facing the building, and facing south. At approximately 1230 hours, a male passerby was helping a female motorist dig her vehicle out of the snow. That vehicle was located in the second space in the lot, adjacent to the Oldsmobile. After the vehicle in the second parking space backed out, the passerby noticed that the Oldsmobile was idling. He looked inside the vehicle and it looked as if the occupants were sleeping. He yelled at one of the occupants to

wake her but there was no response. He opened the passenger side door and checked the pulse of the front right seat occupant and found no pulse. He turned off the car engine because it was very warm inside the vehicle and then notified authorities. The first responder was a security officer associated with the ski resort. He reported that the driver was slumped over towards the center seat face down and had blood coming from her nose. The first row middle occupant was lying partially on top of the front right occupant with her right arm near the floor board. The first row right occupant was slumped inward towards the center of the vehicle behind the second row middle occupant.

Police and emergency personnel were notified by the security officer. The responding EMS personnel were unable to find any pulses and also noted that they felt rigor mortis in the bodies. They contacted the hospital who advised them to cease any resuscitation efforts.

When the investigators arrived they noted that there was 0.6 m (2 ft) of snow on the vehicle and 0.6-0.9 m (2-3 ft) of snow on the ground around the vehicle. They also noted that the vehicle's tail pipe was bent up under the wheel well and there was snow in the pipe.

The report indicated that the occupants were last seen at approximately 2200 hours the night before, and that they may have gone to their vehicle to consume alcohol since they were not allowed to do so in the housing unit.

The driver had a Blood Alcohol Content (BAC) of 0.035 and tested positive for cannabinoids. The front seat middle occupant had a BAC of 0.138 and tested positive for cannabinoids. The front seat right occupant had a BAC of 0.075. All three occupants were tested for CO exposure. The carboxyhemoglobin level was 90% for the driver, 74% for the front row middle occupant and 79% for the front row right occupant. Normal carboxyhemoglobin levels are up to 10%; deaths generally occur at levels greater than 40%.

The cause of death for all three occupants was inhalation of products of combustion. Time of death was not known but they were pronounced dead at 1338 hours.

CO Poisoning Discussion

CO is a colorless, odorless gas produced by burning material containing carbon. Red blood cells pick up CO quicker than they pick up oxygen. If there is a lot of CO in the air, the body may replace oxygen in the blood with CO. This process blocks oxygen from getting into the body, which can damage tissues and result in death. Symptoms of CO poisoning include: headache, dizziness, fatigue, nausea/vomiting, and altered mental status. For severe CO poisoning there may be neurological disorders, cardiovascular disorders, and respiratory disorders.

Vehicle Data - 1983 Oldsmobile Cutlass Supreme

The 1983 Oldsmobile Cutlass Supreme 4-door sedan was identified by the Vehicle Identification Number (VIN): 1G3AR69A7DMxxxxxx. According to the police report, the vehicle was brown and silver in color. The Oldsmobile was equipped with a 3.8-liter, 6-cylinder gas engine, automatic transmission, and rear wheel drive. There were no recalls located that related to the engine or exhaust system.

Occupant Demographics

Driver

Age/Sex:	21/Female
Height:	157 cm (62 in)
Weight:	49 kg (109 lbs)
Type of medical treatment:	None

Front row middle occupant

Age/Sex:	17/Female
Height:	183 cm (72 in)
Weight:	85 kg (187 lbs)
Type of medical treatment:	None

Front row right occupant

Age/Sex:	22/Female
Height:	160 cm (63 in)
Weight:	54 kg (119 lbs)
Type of medical treatment:	None

Injuries

Driver: Injuries obtained from autopsy report.

Injury	OIC Code	Injury Mechanism	Confidence Level
Carbon monoxide poisoning	919206.5,0[1]	CO inhalation	Certain

Front row middle occupant: Injuries obtained from autopsy report.

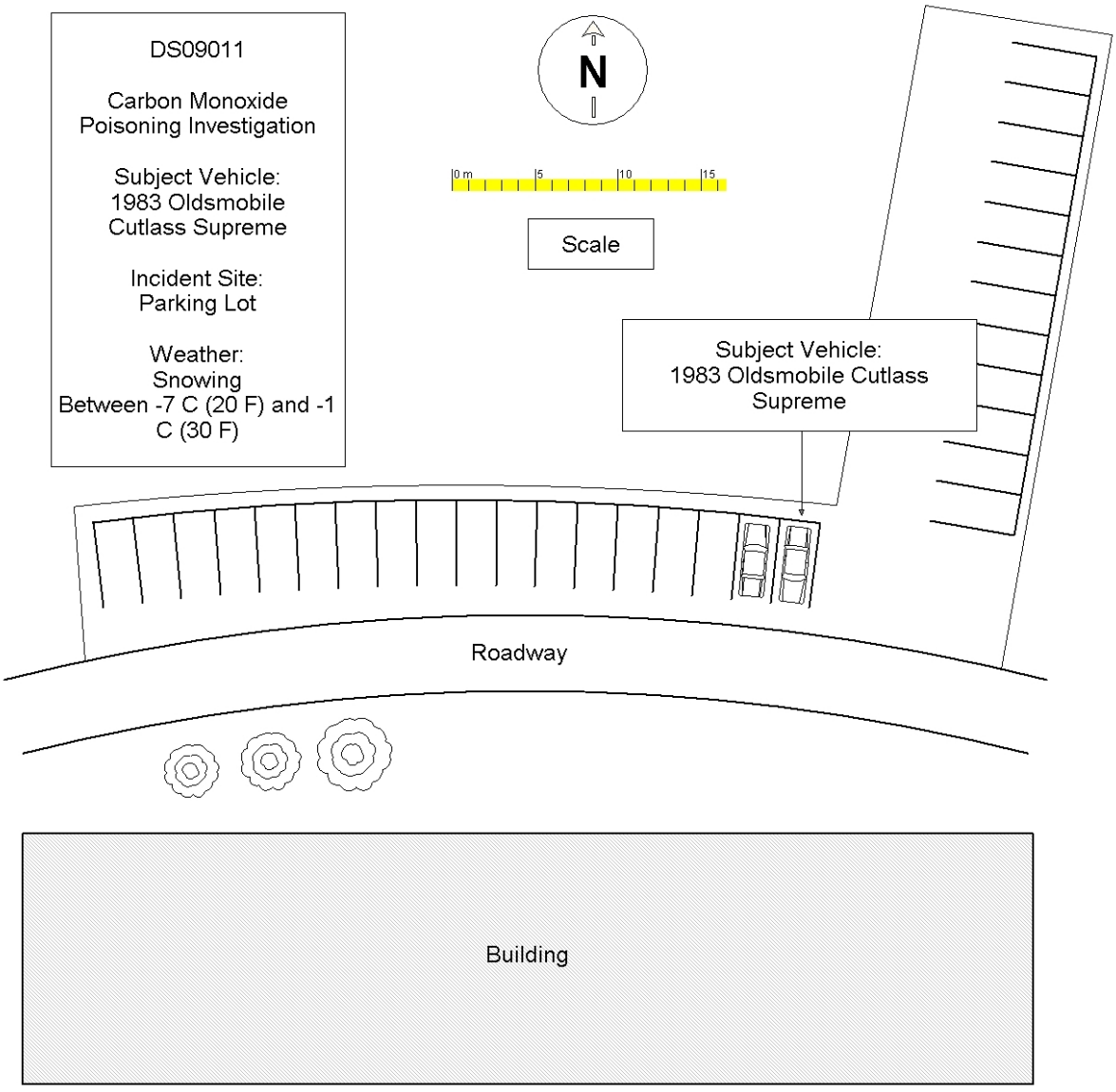
Injury	OIC Code	Injury Mechanism	Confidence Level
Carbon monoxide poisoning	919206.5,0[1]	CO inhalation	Certain

Front row right occupant: Injuries obtained from autopsy report.

Injury	OIC Code	Injury Mechanism	Confidence Level
Carbon monoxide poisoning	919206.5,0[1]	CO inhalation	Certain

[1]Severe (> 40 mg% caroxyhemoglobin)

Scene Diagram



Attachment 1. Data Forms

Not Applicable ☐

Reset Values | Print Forms

U.S. Department of Transportation
National Highway Traffic Safety Administration

SCENE FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 9 0 1 1

IDENTIFICATION

2. Date of Crash 1 2 / X X / 0 8

3. Time of Crash 1 2 3 0

Code reported military time of crash.

NOTE: Midnight = 2400
Unknown = 9999

AMBIENT CONDITIONS

4. Light Conditions

- ☐ Daylight
- ☐ Dark
- ☉ Dark but lighted
- ☐ Dawn
- ☐ Dusk
- ☐ Unknown

5. Atmospheric Conditions
(*Select all that apply)*

- ☐ Clear-No adverse conditions
- ☐ Cloudy
- ☐ Rain
- ☉ Snow
- ☐ Fog, Smog, Smoke
- ☐ Sleet, Hail (freezing rain or drizzle)
- ☐ Blowing Snow
- ☐ Severe Crosswinds
- ☐ Blowing Sand, Soil, Dirt
- ☐ Other (specify):_____
- ☐ Unknown

6. Temperature

- ☉ Below 0 degrees Celsius (Below 32 F)
- ☐ 1-10 degrees Celsius (33-50 F)
- ☐ >10-24 degrees Celsius (51-75 F)
- ☐ Over 24 degrees Celsius (Over 75 F)
- ☐ Unknown

SCENE INFORMATION

7. Type of area in which crash occurred
(*Select all that apply)*

- ☐ Single family residential
- ☉ Row houses/townhouses
- ☉ Multi family housing
- ☐ Commercial
- ☐ Industrial
- ☐ Rural
- ☐ Unknown

8. Driver exterior sightline obstructions
(*Select all that apply)*

- ☉ None
- ☐ Other vehicles
- ☐ Building
- ☐ Trees
- ☐ Shrubbery
- ☐ Other (specify)_____
- ☐ Utility poles
- ☐ Signs
- ☐ Glare
- ☐ Unknown
- ☐ No driver present

9. Crash location

- ☐ Driveway
- ☉ Parking Lot
- ☐ Sidewalk
- ☐ Alley
- ☐ Intersection of driveway and sidewalk
- ☐ Road / street
- ☐ Roadside / shoulder
- ☐ Other (specify)_____
- ☐ Unknown

10. Non motorist sightline obstructions
(*Select all that apply)*

- ☐ None
- ☐ Other vehicles
- ☐ Building
- ☐ Trees
- ☐ Shrubbery
- ☐ Utility poles
- ☐ Signs
- ☐ Glare
- ☐ Other (specify) _____
- ☉ Unknown

11. Grade at parked position + / - 9 9 9 %

12. Estimated distance from parked position to impact

0 0 0 . 0 m

13. Estimated speed at impact 0 0 0 kmph

14. Grade at impact +/ - 9 9 9 %

15. Estimated distance from impact to vehicle final rest

0 0 0 . 0 m

Unknown = 999 Reference Items 11,12, 13, 14, 15

Not Applicable ☐

Reset Values

U.S. Department of Transportation
National Highway Traffic Safety Administration

VEHICLE FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number D S 0 9 0 1 1

VEHICLE IDENTIFICATION

2. VIN 1 G 3 A R 6 9 A 7 D M X X X X X X

3. Model Year 1 9 8 3

4. Vehicle Make (specify): OLDSMOBILE

5. Vehicle Model (specify): CUTLASS SUPREME 4-DR

GLAZING

Location	Presence (check)	Status (select)	Clarity (select)	Tint (check)	Glazing Obstructions (specify if present)
Windshield	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
LF	☑	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☑ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
RF	☑	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☑ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
2nd Left	☑	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☑ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
2nd Right	☑	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☑ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
3rd Left	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
3rd Right	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Backlight	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Left Backlight	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Right Backlight	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Roof	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Other (specify)	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	

TIRE DATA

6. Vehicle Manufacturer Recommended Tire Size UNKNOWN

7. LF Tire Size UNKNOWN

8. LR Tire Size UNKNOWN

9. RF Tire Size UNKNOWN

10. RR Tire Size UNKNOWN

Seats / Head Restraint Data

Seat Position	Seat Type (Select from below)	Head Restraint (Check if available)	Head Restraint Adjustment (select)	NOTES:
Front Left	99	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
Front Middle	99	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
Front Right	99	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
2nd Left	99	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
2nd Middle	99	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
2nd Right	99	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
3rd Left	0	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
3rd Middle	0	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
3rd Right	0	☐	☐ ☐ ☐ Full Down / Mid / Full Up	

Seat Type codes:

0 = No seat or seat folded down
1 = Bucket
2 = Bucket w/ folding back
3 = Bench
4 = Bench with folding back cushions
5 = Bench w/ folding back
6 = Split bench w/ separate back cushions
7 = Split bench w/ separate folding back
8 = Pedestal (i.e. column supported)
9 = Box mounted (i.e. van type)
10= Other seat type (specify)
99= Unknown seat type

VEHICLE MEASUREMENTS

Clearance Heights		Measurements (all from ground, and in centimeters	NOTES
Beltline		N/A	
Top of trunk/tailgate		N/A	
Bottom of bumper		N/A	
Trailer hitch (if applicable)		N/A	
Undercarriage			
	Sway bar	N/A	
	Axle	N/A	
	Differential	N/A	
	Other (specify): _____	N/A	
Sensor Height (if equipped)		N/A	
Camera Height (if equipped)		N/A	

Not Applicable ☑

Undo Not Applicable

Reset Values

U.S. Department of Transportation
National Highway Traffic Safety Administration

Back Up / Parking Aid Form

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 9 0 1 1

PARKING AID PRESENCE

2. Type of backing/parking aid present

- ☐ OEM camera
- ☐ OEM ultrasonic/radar sensor
- ☐ OEM combination camera-ultrasonic/radar sensor
- ☐ OEM Fresnel lens
- ☐ OEM interior mirrors
- ☐ Aftermarket camera
- ☐ Aftermarket ultrasonic/radar sensor
- ☐ Aftermarket combination camera-ultrasonic radar sensor
- ☐ Aftermarket Fresnel lens
- ☐ Aftermarket interior mirrors
- ☐ Other (specify): _____

CAMERA INFORMATION

Specify field of view measurements on diagram

3. System make/model

_____

4. Video monitor type

- ☐ None present
- ☐ LCD (color)
- ☐ CRT (black & white)
- ☐ Unknown

5. Video display size _____ cm
(Diagonal)

6. Camera location

- ☐ None present
- ☐ Bumper
- ☐ License plate
- ☐ Tailgate/Hatch/Trunk
- ☐ Other (specify): _____

7. Video image quality under scene lighting conditions

- ☐ None present
- ☐ Good
- ☐ Average
- ☐ Poor (specify): _____
- ☐ Unknown

8. Was the camera functioning properly

- ☐ None present
- ☐ Yes
- ☐ No, poor image quality due to glare
- ☐ No, poor image quality due to atmospheric conditions
- ☐ No, camera turned off
- ☐ No, camera inoperable
- ☐ Unknown

ULTRASONIC/RADAR SENSOR

Specify object detection range on diagram

9. System make/model

_____

10. Auditory warning illumination

- ☐ No sensor present
- ☐ Yes
- ☐ No
- ☐ Unknown

11. Number of sensors ____

12. Sensor locations
(Select all that apply)

- ☐ No sensor present
- ☐ Left bumper
- ☐ Center bumper
- ☐ Right bumper
- ☐ License plate area
- ☐ Tailgate/Hatch/Trunk

13. Was warning system functioning properly

- ☐ No sensor present
- ☐ Yes, system alerted driver
- ☐ No, system did not alert driver
- ☐ No, system turned off
- ☐ No, system inoperable
- ☐ Unknown

14. Did driver react to warning

- ☐ No sensor present
- ☐ Yes
- ☐ No
- ☐ Unknown
- ☐ Sensor present, did not sound

15. Did driver report common false warnings

- ☐ No sensor present
- ☐ Yes
- ☐ No
- ☐ Unknown

Not Applicable

No Driver Present ☐

Reset Values

U.S. Department of Transportation
National Highway Traffic Safety Administration

DRIVER FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 9 0 1 1

DRIVER PROFILE

2. Driver's Age 2 1
99 = Unknown

3. Driver's Sex
- ☐ Male
- ☉ Female
- ☐ Unknown

4. Driver's Height 1 5 7 cm
999 = Unknown

5. Driver's Weight 0 4 9 kg
999 = Unknown

6. Driver eyewear worn
(Select all that apply)
- ☐ None
- ☐ Eyeglasses
- ☐ Sunglasses
- ☐ Contacts
- ☉ Unknown

7. Driver vision deficiency condition
(Select all that apply)
- ☐ None
- ☐ Near sighted
- ☐ Far sighted
- ☐ Astigmatism
- ☐ Other (specify) _____
- ☉ Unknown

8. Non motorist's relationship to driver
- ☐ No relationship
- ☐ Child
- ☐ Grandchild
- ☐ Sibling
- ☐ Neighbor
- ☐ Friend
- ☉ Other (specify): N/A
- ☐ Unknown

DRIVER ACTIONS

9. Driver approach to vehicle for entry
- ☐ From left front
- ☐ From left
- ☐ From left rear
- ☐ From right rear
- ☐ From right front
- ☐ Circled vehicle
- ☐ Return trip (backing into driveway/lot)
- ☐ Other (specify): _____
- ☉ N/A
- ☐ Unknown

10. Driver entry interruption
(Select all that apply)
- ☐ Direct trip from building to vehicle
- ☐ Loaded items into vehicle
- ☐ Spoke with family
- ☐ Spoke with neighbors
- ☐ Spoke with contacted nonmotorist
- ☐ Return trip (backing into driveway/lot)
- ☐ Other (specify): _____
- ☉ N/A
- ☐ Unknown

11. Purpose of backing
- ☐ Leaving parking space in parking lot
- ☐ Backing onto roadway from driveway
- ☐ Entering parking space in parking lot
- ☐ Backing into driveway from roadway
- ☐ Other (specify): _____
- ☉ N/A
- ☐ Unknown

12. Where was driver going
Description:

N/A

13. Driver in a hurry
- ☐ Yes
- ☐ No
- ☉ N/A
- ☐ Unknown

14. How did driver check behind (rear area of vehicle) after vehicle entry
(Select all that apply)
- ☐ Did not look
- ☐ Checked mirrors
- ☐ Turned right and looked back
- ☐ Turned left and looked back
- ☐ Viewed Camera
- ☐ Listened for auditory/visual warning from system
- ☐ Other (specify): _____
- ☉ N/A
- ☐ Unknown

15. Estimated time between vehicle entry and start of backing
- ☐ 0-10 Seconds
- ☐ 11-30 Seconds
- ☐ 31-60 Seconds
- ☐ Over 60 Seconds
- ☉ N/A
- ☐ Unknown

16. What direction was the driver looking during backing maneuver
(Select all that apply)

- ☐ Straight ahead
- ☐ Right
- ☐ Left
- ☐ Rearward
- ☐ At object inside the car
- ☐ At mirrors
- ☐ Other (specify): _____
- ☉ N/A
- ☐ Unknown

17. Was the driver distracted during back up maneuver
(Select all that apply)

- ☐ No non-driving activities

External

- ☐ Looking at other vehicles
- ☐ Looking at other non motorist
- ☐ Looking at intended turn destination
- ☐ External focus, not specified
- ☐ Other external focus (specify): _____

Internal

- ☐ Looking at other occupant
- ☐ Talking to passenger
- ☐ Dialing phone
- ☐ Talking on phone
- ☐ Listening to radio/cd/portable playback device
- ☐ Adjusting radio/cd player
- ☐ Adjusting climate controls
- ☐ Using a device/controls integral to vehicle (specify): _____
- ☐ Reading/adjusting navigation system
- ☐ Eating or drinking
- ☐ Smoking related
- ☐ Retrieving fallen object (specify): _____
- ☐ Internal focus, not specified
- ☐ Focused on other internal object (specify): _____
- ☉ N/A
- ☐ Unknown

18. Driver avoidance actions prior to impact
(Select all that apply)

- ☐ None
- ☐ Braking
- ☐ Steering left
- ☐ Steering right
- ☐ Accelerating
- ☐ Other (specify): _____
- ☉ N/A
- ☐ Unknown

19. Did driver see struck non motorist prior to impact
(Select all that apply)

- ☐ No, never saw non motorist
- ☐ Saw non motorist prior to entering vehicle
- ☐ Saw non motorist after entering vehicle
- ☐ Other (specify): _____
- ☉ N/A ☐ Unknown

20. Est time between start of backing and impact

- ☐ <2 or = 1 second
- ☐ 2-5 seconds
- ☐ 6-10 seconds
- ☐ > 10 seconds
- ☉ N/A ☐ Unknown

21. Driver interior sightline obstructions
(Select all that apply)

- ☐ Pillar
- ☐ Headrest
- ☐ Cargo
- ☐ Other occupant
- ☐ Other (specify) _____
- ☐ Unknown
- ☉ None

22. Recent experience driving this vehicle

- ☐ More than 10 times the last three months
- ☐ 6-10 times the last three months
- ☐ 2-5 times the last three months
- ☐ Less than 2 times the last three months
- ☐ First time driving this vehicle
- ☉ N/A
- ☐ Unknown

23. Frequency of driving in this parking lot/driveway

- ☐ Daily
- ☐ Weekly
- ☐ Several times a month
- ☐ Monthly
- ☐ Rarely
- ☐ First time in lot/driveway
- ☉ N/A ☐ Unknown

24. Driver Impairment
(Select all that apply)

- ☐ No drugs or alcohol present
- ☉ Alcohol present (specify BAC): .035
- ☉ Drugs present (specify): Positive, marijuana
- ☐ Unknown

25. Source of alcohol/drug results

- ☉ Police reported
- ☐ Medical record
- ☐ Other (specify)_____
- ☐ Not Tested
- ☐ Unknown if tested

Not Applicable ☑
Undo Not Applicable

U.S. Department of Transportation
National Highway Traffic Safety Administration

Non Motorist Form

Reset Values

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number
D S 0 9 0 1 1

NON-MOTORIST PROFILE

2. Non-motorist's Age ☐ Months ☐ Years
99 = Unknown

3. Non-motorist's Sex
☐ Male
☐ Female
☐ Unknown

4. Non-motorist's Height ____ ____ ____ cm
999 = Unknown

5. Non-motorist's Weight ____ ____ ____ kg
999 = Unknown

6. Medical outcome

☐ Not injured
☐ ER only
☐ Hospitalized 1-4 days
☐ Hospitalized 5 days or more
☐ Treatment later
☐ Fatal
☐ Unknown

7. Source of most severe injury
☐ Bumper
☐ Tire
☐ Undercarriage
☐ Other Specify: _____
☐ Ground
☐ N/A
☐ Unknown

Not Applicable

8. Non-motorist impairment
(Select all that apply)
☐ No drugs or alcohol present
☐ Positive for alcohol (specify BAC): .035
☐ Positive for drugs (specify): _____
☐ Unknown

9. Source of alcohol/drug results
☐ Police reported
☐ Medical Report
☐ Other (specify) _____
☐ Not Tested
☐ Unknown if tested

NON-MOTORIST ACTIONS

10. Non-motorist attitude

☐ Standing
☐ Bending at waist
☐ Sitting
☐ Crouching
☐ Kneeling
☐ On skates/skateboard
☐ On bike/scooter
☐ Other (specify)_____
☐ Unknown

11. Non-motorist motion

☐ Not moving
☐ Walking slowly
☐ Walking rapidly
☐ Running or jogging
☐ Skipping/Hopping/Jumping
☐ Falling/Stumbling/Rising
☐ On skates/skateboard
☐ On bike/scooter
☐ Other (specify): _____
☐ Unknown

12. Non-motorist approach relative to rear of vehicle

☐ Stationary
☐ From left
☐ From right
☐ From behind
☐ Other (specify): _____
☐ Unknown

13. Non-motorist first avoidance action

☐ No avoidance actions
☐ Stopped
☐ Accelerated pace
☐ Ran away (along vehicle path)
☐ Jumped
☐ Turned away from vehicle
☐ Turned toward vehicle and braced
☐ Drove or pulled away from vehicle
☐ Other (specify): _____
☐ Unknown

14. Non-motorist primary focus of attention

☐ Striking vehicle
☐ Play object
☐ Person
☐ Surrounding traffic
☐ Animal
☐ Handheld electronic (phone, MP3 player, etc.)
☐ Other Object (specify) _____
☐ Unknown

15. Were any other Non-motorists present?
(Select all that apply)

☐ Alone
☐ One adult present
☐ One other child present
☐ Multiple adults present
☐ Multiple children present
☐ Unknown

NON MOTORIST CLOTHING

NOTES:

- Specify Color, Fabric and Texture/Weight for outermost layer only
- Indicate "*NONE*" if applicable
- Available codes:

Colors		***Fabrics***	***Textures***	***Weights***
Black	Charcoal gray	Natural	Soft	Heavy
Lt gray/silver	Brown	Synthetic	Slick	Medium
Gold/tan	Purple	Blend	Coarse	Light
Dark blue	Light blue			
Dark green	Light green			
Maroon	Red			
Orange	Yellow			
White	Other (specify)			
Pink				

	Clothing	Color	Fabric	Texture	Weight
HEADWEAR	Hat				
	Helmet				
	Hood				
	Other (specify): _____				
	Unknown				
UPPER BODY	Short Sleeve				
	Long Sleeve				
	Light Jacket				
	Heavy Jacket				
	Other (Specify): _____				
	Unknown				
LOWER BODY	Shorts				
	Pants				
	Shoes				
	Other (specify): _____				
	Unknown				

Not Applicable