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

NHTSA

DOT HS 812 608

August 2018

# Remote Non-Traffic Surveillance Hyperthermia Fatality Investigation Vehicle: 2002 Ford Econoline Location: Kansas Crash Date: July 2016

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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 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 vehicles or their safety systems.

This report and associated case data are based on information available to the Special Crash Investigation team on the date this report was published.

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Remote Non-Traffic Surveillance Hyperthermia investigation involving a 2002 Ford E150 Econoline van and a 19-month-old female child.

16. Abstract

This report documents the remote investigation of the heat stroke death of a 19-month-old female who entered a parked, unoccupied 2002 E150 Ford Econoline van, was unable to exit the vehicle, and died of heat stroke. This incident occurred in a remote, rural farming area in the driveway of a single-family residence. The Ford was parked unlocked with the keys in the ignition in the driveway behind the residence following the return of the 10-member family from church. It was determined based on the available information that between the hours of 1400 and 1800 the 19-month-old female victim and her 3-year-old brother exited the residence. It is believed that the brother opened the right rear door of the vehicle and the two children entered the vehicle. The brother then exited the vehicle and closed the door leaving the victim in the vehicle where she died of heat stroke.

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# INDIANA UNIVERSITY

## TRANSPORTATION RESEARCH CENTER
## REMOTE NON - TRAFFIC SURVEILLANCE
## HYPERTHERMIA INVESTIGATION

CASE NUMBER - IN16033
LOCATION - KANSAS
VEHICLE - 2002 E150 ECONOLINE VAN
INCIDENT DATE - JULY 2016

### BACKGROUND

This report documents the remote investigation of the heat stroke death of a 19-month-old female who entered a parked, unoccupied 2002 Ford Econoline van (**Figure 1**) and was unable to exit the vehicle. This incident investigation was initiated by the National Highway Traffic Safety Administration on September 28, 2016. This investigation was assigned on December 6, 2016, following preliminary investigation by the Special Crash Investigation (SCI) Team at the Indiana University Transportation Research Center, in which the police incident report was obtained and the victim's mother was interviewed. Police on-scene photographs were subsequently obtained on December 28, 2016. Attempts to arrange an inspection of the involved vehicle and incident scene were unsuccessful and a remote investigation was conducted. This incident occurred in a residential driveway in July 2016 between 1400 and 1800 hours in Kansas and was investigated by the local police agency.

**Figure 1:** Police photo of the 2002 Ford E150 Econoline Wagon Van; view northeast

This incident occurred in a remote, rural farm area in the driveway of a single-family residence. The Ford was parked unlocked with the keys in the ignition in the driveway behind the residence following the return of the 10-member family from church. It was determined based on the available information that between the hours of 1400 and 1800 the 19-month-old female victim and her 3-year-old brother exited the residence. It is believed that the brother opened the right rear door of the vehicle and the two children entered the vehicle. The brother then exited the vehicle and closed the door leaving the victim in the vehicle where she died of heat stroke.

### INCIDENT SUMMARY

***Incident Site:*** This incident occurred between 1400 and 1800 hours in a remote, rural farm area in the driveway of a single-family residence. The Ford was parked in the driveway facing south behind the residence (**Figure 2**) between an unknown year Dodge Durango and an unknown year inoperable Pontiac Montana. The Ford was located an estimated 15 m (50 ft) east of the back entrance to the residence. The vehicle was not shaded by trees or buildings during the time that

the incident occurred. The weather conditions during the time range that the incident occurred were clear with 16 kilometers (10 miles) visibility and south-southeast to southeast winds at 16 to 26 km/h (10 to 16 mph). The temperature range was 33.3 to 36.1 °C (92 to 97 °F) with a heat index of 37.8 to 41.7 °C (100 to 107 °F), humidity of 46 to 52 percent, and a dew point of 22.2 to 22.8 °C (72 to 73 °F), according to local weather reports. The incident diagram is included at the end of this report. The Not-in-Traffic Surveillance data forms are attached to the end of this report as Attachment.

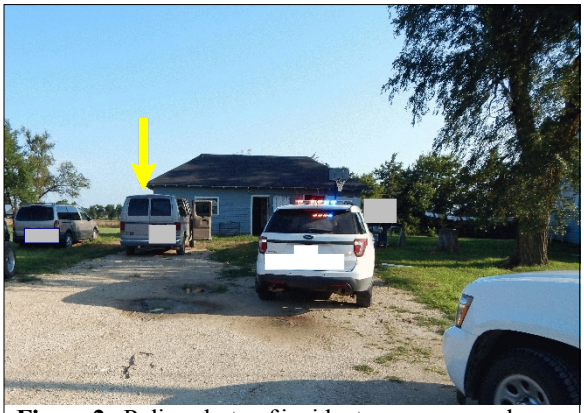


**Figure 2:** Police photo of incident scene; arrow shows incident vehicle; view south toward garage; residence to right

***Pre-Incident:*** The family consisted of the pregnant[1] 40-year-old mother, 39-year-old father, and eight children ranging in age from 19 months (the victim) to 12 years. The family traveled to church in the Ford on the morning of the incident and returned home at approximately 1100 hours. The Ford was usually locked, but on this day the keys were left in the ignition and the vehicle was left unlocked since the mother was planning to go to a convenience store later in the day to buy ice. The family had lunch at approximately 1230 hours. Following lunch, the children played and did chores. Between the hours of 1330 and 1400 the father read a story to all the children in the living room of the residence. The mother stated during the SCI interview that she would usually put the victim down for a nap in the afternoon but did not recall doing that following the story. She also stated that sometimes one of the older children would help out by putting the victim down for a nap, but again she did not recall if that occurred. The police incident report, which included interviews with the father and mother and some of the children, gave no indication that the victim was put down for a nap. The available information suggested that the victim probably played with the other children after the father read them the story. At an unknown time following the story, the father went upstairs and took a nap and the mother also took a nap while watching television. The police incident report stated that the last time any of the family members remembered seeing the victim was at 1400 hours.

***Incident:*** At 1800 hours the family realized that the victim was missing and a search ensued inside and outside of the residence. The deceased victim was found by the father in the driver's seat of the Ford after an approximate 10-minute search.

It was revealed in the police incident report through interviews with family members that the victim and her 3-year-old brother enjoyed playing together. The victim was described as the brother's "side kick" by the mother. It was also reported that the 3-year-old liked to pretend driving a vehicle and had done so previously in the inoperable Pontiac (no indication this occurred on the day of the incident) that was parked next to the Ford. It was also reported by the father that "the children liked to play with the keys." The 3-year-old was capable of opening the side doors to the Ford and demonstrated this to police during their investigation. He was also capable of opening the doors to the residence. According to the mother, the victim was capable of entering the Ford on her own by climbing onto the step in the door frame (**Figure 3**) and then

[1] The mother was reported as being 36 weeks pregnant in the police incident report.

climbing into the vehicle. It was determined that the 3-year-old was outside the residence during the time the victim went missing since the father reported seeing him enter the residence while the father was in the kitchen just prior to the discovery that the victim was missing. The available information indicated that at some time after 1400 hours the victim followed her 3-year-old brother outside to play as she was known to do. It is believed that the 3-year-old opened the right rear door to the Ford and they entered the vehicle. The right rear door was considered the most likely door of entry since the victim's and brother's child restraint systems were located in the second row seat. Therefore, the right rear door was likely the normal door through which they entered the vehicle. At some point after entering the vehicle, the 3-year-old exited the vehicle and closed the door leaving the victim in the vehicle who subsequently succumbed to heat stroke.

**Figure 3:** Police photo showing step in right rear door frame

***Post-Incident:*** The father removed the victim from the vehicle and attempted cardio-pulmonary resuscitation (CPR) while his 12-year-old son called 9-1-1. Emergency medical service received notification of the incident at 1807 hours according to the victim's autopsy report. The police were dispatched at 1817 hours and the first officer arrived at the scene at 1826 hours. The autopsy report stated that the victim was pronounced deceased at 1900 hours. At 2020 hours the victim was transported by mortuary vehicle to a local funeral home.

## 2002 FORD E150 ECONOLINE VAN

### DESCRIPTION

The Ford was a rear-wheel-drive, 8-passenger, van having the VIN 1FMRE11L32Hxxxxxx, equipped with a 5.4-liter, V-8 engine, 4-speed automatic transmission, 4-wheel antilock brakes with electronic brake force distribution, and driver and passenger frontal air bags. The vehicle was not equipped with child safety locks.

## 2002 FORD E150 ECONOLINE VAN OCCUPANT CHILD

### OCCUPANT DEMOGRAPHICS

The 19-month-old female victim's height and weight were reported as 79 cm (31 in) and 12 kg (26 lbs) in the autopsy report.

## CHILD OCCUPANT INJURIES

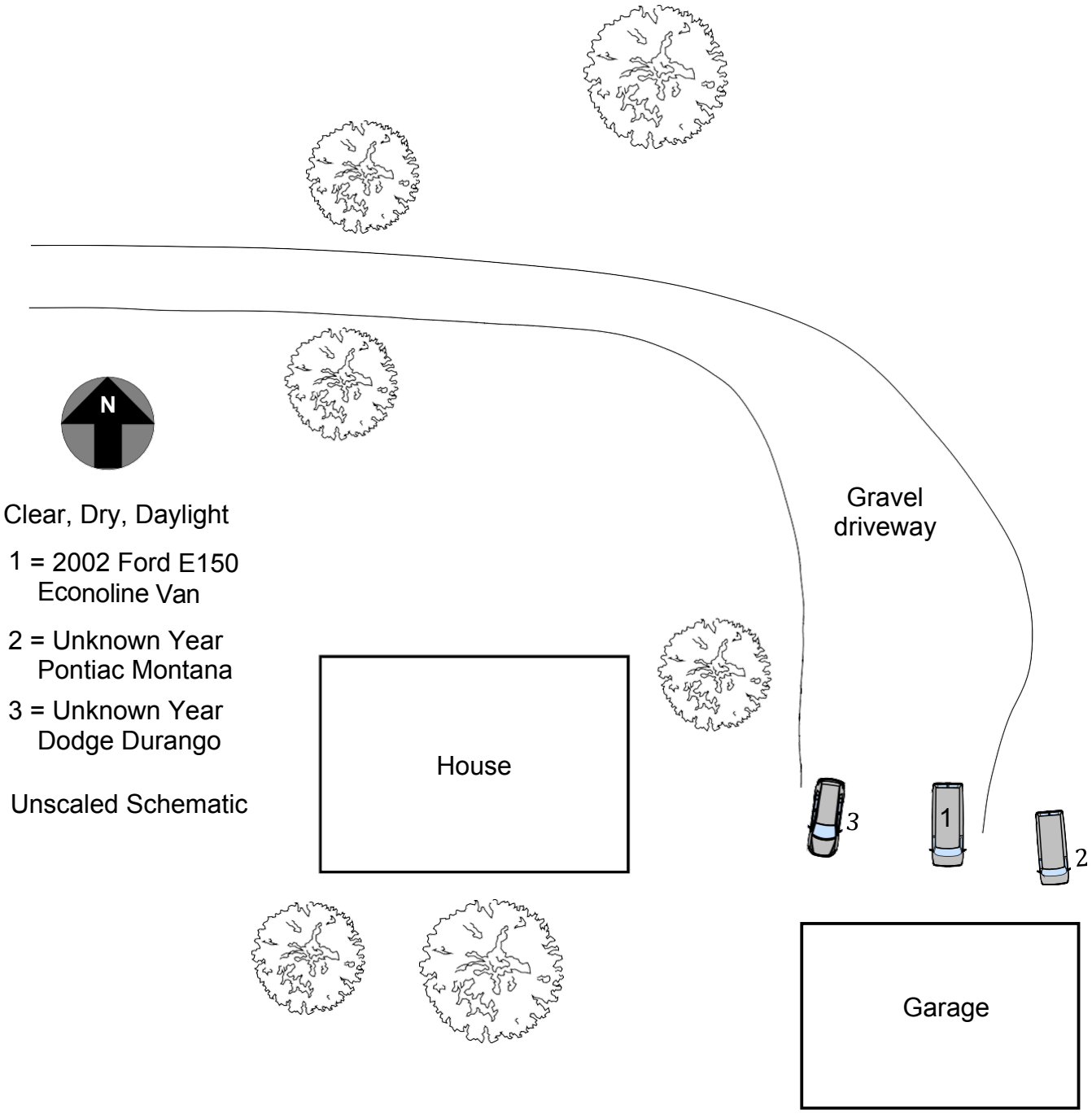
| Injury No. | Injury | AIS 2015 | Involved Physical Components (IPC) | IPC Confidence Level |
|---|---|---|---|---|
| 1 | Hyperthermia[2] resulting in early decomposition and pale musculature, diffusely | 010200.1 | Heat casualty | Certain |

*Source: Autopsy records*.

The autopsy report listed the time of death as 1900 hours. The autopsy report also stated that there were no indications of "antecedent physical trauma or inadequate physical care."

[2] Child discovered in their family van, obviously deceased. Findings are consistent with hyperthermic death and postmortem thermal insult; there is no indication of antecedent physical trauma or of inadequate physical care.

Incident Schematic




Clear, Dry, Daylight

1 = 2002 Ford E150
Econoline Van

2 = Unknown Year
Pontiac Montana

3 = Unknown Year
Dodge Durango

Unscaled Schematic

# Appendix A
# Non-Traffic Surveillance Data Forms

Not Applicable ☐

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National Highway Traffic Safety Administration

# SCENE FORM

Special Crash Investigations
Non-Traffic Surveillance

1. Case Number

I N 1 6 0 3 3

## IDENTIFICATION

2. Date of Crash 0 7 / x x / 1 6

3. Time of Crash 9 9 9 9

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

9 9 9 . 9 m

13. Estimated speed at impact 9 9 9 kmph

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

15. Estimated distance from impact to vehicle final rest

9 9 9 . 9 m

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

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Not Applicable ☐

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# VEHICLE FORM

Special Crash Investigations
Non-Traffic Surveillance

1. Case Number I N 1 6 0 3 3

## VEHICLE IDENTIFICATION

2. VIN 1 F M R E 1 1 3 2 H X X X X X X X

3. Model Year 2 0 0 2

4. Vehicle Make (specify): Ford

5. Vehicle Model (specify): E150 Econoline Wagon Van

## 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

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**Seats / Head Restraint Data**

| Seat Position | Seat Type (Select from below ) | Head Restraint (Check if available) | Head Restraint Adjustment (select) | NOTES: |
|---|---|---|---|---|
| Front Left | 1 | ☑ | Full Down / Mid / Full Up | Front row head restraints are fixed |
| Front Middle | 0 | ☐ | Full Down / Mid / Full Up | |
| Front Right | 1 | ☑ | Full Down / Mid / Full Up | |
| 2nd Left | 5 | ☐ | Full Down / Mid / Full Up | |
| 2nd Middle | 5 | ☐ | Full Down / Mid / Full Up | |
| 2nd Right | 5 | ☐ | Full Down / Mid / Full Up | |
| 3rd Left | 99 | ☐ | Full Down / Mid / Full Up | |
| 3rd Middle | 99 | ☐ | Full Down / Mid / Full Up | |
| 3rd Right | 99 | ☐ | 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 | |

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Not Applicable ☑

Undo Not Applicable

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National Highway Traffic Safety Administration

# Back Up / Parking Aid Form

Special Crash Investigations
Non-Traffic Surveillance

1. Case Number

I N 1 6 0 3 3

## 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



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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

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No Driver Present ☑

Undo Not Applicable

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# DRIVER FORM

Special Crash Investigations
Non-Traffic Surveillance

1. Case Number

I N 1 6 0 3 3

## DRIVER PROFILE

2. Driver's Age ____ ____
   99 = Unknown
3. Driver's Sex
   - ☐ Male
   - ☐ Female
   - ☐ Unknown
4. Driver's Height ____ ____ ____ cm
   999 = Unknown
5. Driver's Weight ____ ____ ____ 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): _____
   - ☐ 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:

    _____

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

Not Applicable

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

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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): _____
- ☐ Drugs present (specify):_____
- ☐ Unknown

25. Source of alcohol/drug results

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



Revised January 2018

Not Applicable ☐

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

# Non Motorist Form

Special Crash Investigations
Non-Traffic Surveillance

1. Case Number
I N 1 6 0 3 3

## NON-MOTORIST PROFILE

2. Non-motorist's Age (99 = Unknown) 1 9 ◉ Months ☐ Years

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

4. Non-motorist's Height (999 = Unknown) 0 7 9 cm

5. Non-motorist's Weight (999 = Unknown) 0 1 2 kg

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: Hyperthermia
☐ Ground
☐ N/A
☐ Unknown

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

12. Non-motorist approach relative to rear of vehicle
☐ Stationary
☐ From left
☐ From right
☐ From behind
◉ Other (specify): N/A
☐ 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
☐ Dove or fell away from vehicle
◉ Other (specify): N/A
☐ 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) N/A
☐ 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

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## 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 | Pink | Unknown | Soft | Light |
| | Light Jacket | | | | |
| | Heavy Jacket | | | | |
| | Other (Specify): _____ | | | | |
| | Unknown | | | | |
| LOWER BODY | Shorts | | | | |
| | Pants | | | | |
| | Shoes | | | | |
| | Other (specify): Diaper | White | Synthetic | Soft | Medium |
| | Unknown | | | | |

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of Transportation

**National Highway
Traffic Safety
Administration**


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