



PAPERWORK REDUCTION ACT PUBLIC BURDEN STATEMENT

According to the Paperwork Reduction Act of 1995, a Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a current valid OMB control number. The valid OMB control number for this information collection is 2137-0034. The information requested on this form is being collected by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA). Public reporting burden for this collection of information is estimated to be 60 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection are voluntary. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to: Mr. T. Glenn Foster, Information Collection Clearance Officer, U. S. Department of Transportation, PHMSA, Office of Hazardous Materials Safety, PHH-10, 1200 New Jersey Ave., S.E., 2nd Floor East, E24-301, Washington, DC 20520.

 1. Name of the emergency response agency/organization you are representing:

 2. Location of the emergency response agency/organization:

Town or City: _____

County: _____

State: _____

Zip Code: _____

 3. Point of Contact (POC) information for the responder conducting the emergency response simulation:

Name: _____

Title: _____

Address: _____

Phone: _____

Email: _____

 4. POC information for your emergency response agency's/organization's paperless hazardous materials (e-HM) communication system (e-system) (enter "UNKNOWN" or "UNWILLING" in each field if you do not know this information or do not want to provide it):

Name: _____

Title: _____

Address: _____

Phone: _____

Email: _____

 5. Describe the size and geographic parameters of your agency's/organization's jurisdiction:

- All U.S. (including navigable waters)
- Continental U.S.
- State-wide
- County-wide
- Within city/town limits
- Other, please describe: _____

 6. How often does your agency/organization respond to HM incidents?

- a. Daily
- b. Weekly
- c. Monthly
- d. Quarterly (four times/year)
- e. Semi-annually (two times/year)
- f. Annually
- g. Other, please identify frequency: _____
- h. Unknown

 7. Approximately how many transportation HM incidents does your agency/organization respond to annually?

- 0 to 5
- 6 to 10
- 11 to 50
- 51 to 100
- Over 100
- Unknown

8. Which transportation mode(s) has your agency/organization responded to for an HM incident in the past year? Please select all that apply:

- Roadway
- Rail
- Air
- Maritime
- Unknown
- None

9. Does your agency/organization utilize an outside company to assist with HM information and emergency response communication?

- Yes
- No
- Unknown

 10. What is the name of the Public Safety Answering Point (PSAP) which has jurisdiction for the location of the emergency response simulation?

 11. Location of responsible PSAP:

Town or City: _____

County: _____

State: _____

Zip Code: _____

 12. POC information for the responsible PSAP:

Name: _____

Title: _____

Address: _____

Phone: _____

Email: _____

Branching Information

- If not 14. Was a driver/pilot/captain/conductor involved... = Yes then Hide 14a. Provide POC information for the driver/pilot/...
- If 14. Was a driver/pilot/captain/conductor involved... = No then Hide 14a. Provide POC information for the driver/pilot/...
- If not 15. Do you have POC information for the shipper's... = Yes then Hide 15a. Provide POC information for the shipper's and...
- If 15. Do you have POC information for the shipper's... = No then Hide 15a. Provide POC information for the shipper's and...

 13. Name of shipper and/or carrier involved in the emergency response simulation:

 14. Was a driver/pilot/captain/conductor involved in the emergency response simulation?

- Yes
 No

 14a. Provide POC information for the driver/pilot/captain/conductor involved in the emergency response simulation:

Name: _____

Title: _____

Address: _____

Phone: _____

Email: _____

 15. Do you have POC information for the shipper's and/or carrier's e-system?

- Yes
 No

 15a. Provide POC information for the shipper's and/or carrier's e-system (enter "UNKNOWN" in any fields for which you do not know the answer):

Name: _____

Title: _____

Address: _____

Phone: _____

Email: _____

Branching Information

- If not 21e. Did a dispatcher perform any follow-up activi... = Yes then Hide 21f. What follow-up activities were conducted?
- If 21e. Did a dispatcher perform any follow-up activi... = No then Hide 21f. What follow-up activities were conducted?

 16. Location of emergency response simulation:

Street address: _____
City: _____
State: _____
Zip code: _____
Name of site/area, if available (port, airport, station, etc.): _____

 17. Date of emergency response simulation (enter information in YYYY-MM-DD format):

 18. Total time duration of emergency response simulation (enter information HH:MM format):

19. What type(s) of transportation conveyances were involved, or used to transport the HM containers involved, in the emergency response simulation? Select all that apply:

- Trucks
- Planes
- Ships
- Railcars
- Other, please identify: _____

20. What emergency response entities participated in the emergency response simulation? Select all who participated:

- PSAP dispatch
- Police
- Fire
- Ambulance
- Emergency Medical Services (EMS)
- Other, please identify: _____

 21. Describe the simulated pilot test HM emergency:

21a. What was the simulated emergency?

- An HM emergency on a roadway
- An HM emergency on a railcar
- An HM emergency on an airplane
- An HM emergency aboard a marine vessel

 21b. Which emergency response entity was contacted first?

- PSAP dispatch
- Police
- Fire
- Ambulance
- EMS
- Other, please identify: _____

 21c. Who contacted the emergency response entity?

- PSAP dispatch

- Driver
- Pilot
- Captain
- Conductor
- Shipper
- Carrier
- Other, please identify: _____

 21d. Which first responder agency/organization arrived on the scene first?

- Police
- Fire
- Ambulance
- EMS
- Other, please identify: _____

 21e. Did a dispatcher perform any follow-up activities to the initial call (e.g., obtaining additional information from a shipper regarding an HM that may be involved in the simulation)?

- Yes
- No

 21f. What follow-up activities were conducted?

22. What class(es) of HM were transported during the simulation? Please select all that apply:

- Class 1 Explosives
- Class 2 Gases
- Class 3 Flammable Liquids (100°F or less, closed cup)
- Class 4 Other Flammable Substances
- Class 5 Oxidizing Substances and Organic Peroxides
- Class 6 Toxic (Poisonous) and Infectious Substances
- Class 7 Radioactive Materials
- Class 8 Corrosives
- Class 9 Miscellaneous Dangerous Materials

23. Was the shipment involved in the simulation a less than truckload (LTL) type HM shipment?

- Yes
- No
- Unknown

Branching Information

- If not 24b. Was an attempt made to transmit the informati... = Yes then Hide 24c. Was the information successfully transmitted ...
- If not 24c. Was the information successfully transmitted ... = Yes then Hide 24d. Who electronically transmitted the informati...
- If not 24c. Was the information successfully transmitted ... = Yes then Hide 24e. What information was transmitted electronica...
- If 24b. Was an attempt made to transmit the informati... = No then Hide 24c. Was the information successfully transmitted ...
- If 24b. Was an attempt made to transmit the informati... = No then Hide 24d. Who electronically transmitted the informati...
- If 24b. Was an attempt made to transmit the informati... = No then Hide 24e. What information was transmitted electronica...

24. Describe the electronic data exchange that occurred with the PSAP dispatcher as part of the HM pilot test simulation:

24a. What HM information did the PSAP dispatcher immediately request? Select all that apply:

- Air Waybill Number
- Basic description of the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor
- Name and address of the consignee
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

24b. Was an attempt made to transmit the information electronically to the PSAP dispatcher?

- Yes
- No

24c. Was the information successfully transmitted electronically to the dispatcher?

- Yes
- No, please explain why the electronic exchange was unsuccessful: _____

24d. Who electronically transmitted the information to the PSAP dispatcher?

- Driver
- Pilot
- Captain
- Conductor

Other, please identify: _____

24e. What information was transmitted electronically to the PSAP dispatcher? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

Branching Information

- If not 26e. How long did it take for the PSAP dispatcher... = More than one hour, please identify total time in HH:MM format: then Hide 26e1. Provide information, if available, on the r...
- If 26e. How long did it take for the PSAP dispatcher... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 26e1. Provide information, if available, on the r...

25. What device(s) and electronic data exchange language were used to transmit the information to the PSAP dispatcher during the HM simulation?

25a. Device(s)--select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

25b. Data exchange language:

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

26. What device(s), electronic data exchange language, communication mechanism(s), and data format were used by the PSAP dispatcher to receive the information during the HM simulation?

26a. Device(s)--select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers

- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

 26b. Data exchange language:

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

26c. Mechanism(s) used for communication--select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- Unknown

 26d. Data format:

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

 26e. How long did it take for the PSAP dispatcher to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

 26e1. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If not 27. Describe the electronic data exchange that occ... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27aa. If electronic data exchange was attempted b...
- If 27. Describe the electronic data exchange that occ... = No--An attempt was not made to provide HM information electronically. then Skip to Page 10
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a1. What information was transmitted electronic...
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a1. What information was transmitted electronic...
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a2. What device(s) did the driver/pilot/captain/...
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a3. What electronic data exchange language did ...
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a4. What device(s) did the emergency responders ...
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a5. What electronic data exchange language did ...
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a6. What mechanism(s) were used for communicatio...
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a7. What data format was used for communication ...
- If not 27. Describe the electronic data exchange that occ... = Yes then Hide 27a8. How long did it take for the emergency resp...
- If 27a8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 27a8a. Provide information, if available, on the ...
- If not 27a8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 27a8a. Provide information, if available, on the ...

 27. Describe the electronic data exchange that occurred with the emergency responders prior to their arrival at the scene as part of the HM pilot test simulation: 27a. Was HM information provided electronically to the emergency responders prior to their arrival at the scene by the driver/pilot/captain/conductor?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 27aa. If electronic data exchange was attempted but unsuccessful, please explain why:

27a1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)

- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

27a2. What device(s) did the driver/pilot/captain/conductor use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27a3. What electronic data exchange language did the driver/pilot/captain/conductor use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27a4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies

- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

 27a5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27a6. What mechanism(s) were used for communication between the emergency responders and the driver/pilot/captain/conductor? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

 27a7. What data format was used for communication between the emergency responders and the driver/pilot/captain/conductor?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

 27a8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

 27a8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If not 27b. Was HM information provided electronically to... = Yes then Hide 27b1. What information was transmitted electronic...
- If not 27b. Was HM information provided electronically to... = Yes then Hide 27b2. What device(s) did the PSAP dispatcher use t...
- If not 27b. Was HM information provided electronically to... = Yes then Hide 27b3. What electronic data exchange language did ...
- If not 27b. Was HM information provided electronically to... = Yes then Hide 27b4. What device(s) did the emergency responders ...
- If not 27b. Was HM information provided electronically to... = Yes then Hide 27b5. What electronic data exchange language did ...
- If not 27b. Was HM information provided electronically to... = Yes then Hide 27b6. What mechanism(s) were used for communicatio...
- If not 27b. Was HM information provided electronically to... = Yes then Hide 27b7. What data format was used for communication ...
- If not 27b. Was HM information provided electronically to... = Yes then Hide 27b8. How long did it take for the emergency resp...
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Skip to Page 11
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27b1. What information was transmitted electronic...
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27b2. What device(s) did the PSAP dispatcher use t...
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27b3. What electronic data exchange language did ...
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27b4. What device(s) did the emergency responders ...
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27b5. What electronic data exchange language did ...
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27b6. What mechanism(s) were used for communicatio...
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27b7. What data format was used for communication ...
- If 27b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27b8. How long did it take for the emergency resp...
- If not 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27bb. If electronic data exchange was attempted b...
- If 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27b1. What information was transmitted electronic...
- If 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27b2. What device(s) did the PSAP dispatcher use t...
- If 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27b3. What electronic data exchange language did ...
- If 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27b4. What device(s) did the emergency responders ...
- If 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27b5. What electronic data exchange language did ...
- If 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27b6. What mechanism(s) were used for communicatio...
- If 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27b7. What data format was used for communication ...
- If 27b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27b8. How long did it take for the emergency resp...
- If 27b8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 27b8a. Provide information, if available, on the ...
- If not 27b8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 27b8a. Provide information, if available, on the ...

 27b. Was HM information provided electronically to the emergency responders prior to their arrival at the scene by the PSAP dispatcher?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 27bb. If electronic data exchange was attempted but unsuccessful, please explain why:

27b1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

27b2. What device(s) did the PSAP dispatcher use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers

- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27b3. What electronic data exchange language did the PSAP dispatcher use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27b4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27b5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27b6. What mechanism(s) were used for communication between the emergency responders and the PSAP dispatcher? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

 27b7. What data format was used for communication between the emergency responders and the PSAP dispatcher?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

 27b8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

 27b8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 27c. Was HM information provided electronically to... = Yes then Hide 27cc. If electronic data exchange was attempted b...
- If not 27c. Was HM information provided electronically to... = Yes then Hide 27c1. What information was transmitted electronic...
- If not 27c. Was HM information provided electronically to... = Yes then Hide 27c2. What device(s) did the shipper use to transm...
- If not 27c. Was HM information provided electronically to... = Yes then Hide 27c3. What electronic data exchange language did ...
- If not 27c. Was HM information provided electronically to... = Yes then Hide 27c4. What device(s) did the emergency responders ...
- ...
- If not 27c. Was HM information provided electronically to... = Yes then Hide 27c5. What electronic data exchange language did ...
- If not 27c. Was HM information provided electronically to... = Yes then Hide 27c6. What mechanism(s) were used for communicatio...
- If not 27c. Was HM information provided electronically to... = Yes then Hide 27c7. What data format was used for communication ...
- ...
- If not 27c. Was HM information provided electronically to... = Yes then Hide 27c8. How long did it take for the emergency resp...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Skip to Page 12
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27cc. If electronic data exchange was attempted b...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27c1. What information was transmitted electronic...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27c2. What device(s) did the shipper use to transm...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27c3. What electronic data exchange language did ...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27c4. What device(s) did the emergency responders ...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27c5. What electronic data exchange language did ...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27c6. What mechanism(s) were used for communicatio...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27c7. What data format was used for communication ...
- If 27c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27c8. How long did it take for the emergency resp...
- If not 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27cc. If electronic data exchange was attempted b...
- If 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27c1. What information was transmitted electronic...
- If 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27c2. What device(s) did the shipper use to transm...
- If 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27c3. What electronic data exchange language did ...
- If 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27c4. What device(s) did the emergency responders ...
- If 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27c5. What electronic data exchange language did ...
- If 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27c6. What mechanism(s) were used for communicatio...
- If 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27c7. What data format was used for communication ...
- If 27c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27c8. How long did it take for the emergency resp...
- If 27c8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 27c8a. Provide information, if available, on the ...
- If not 27c8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 27c8a. Provide information, if available, on the ...

 27c. Was HM information provided electronically to the emergency responders prior to their arrival at the scene by the shipper?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 27cc. If electronic data exchange was attempted but unsuccessful, please explain why:

27c1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

27c2. What device(s) did the shipper use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies

- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27c3. What electronic data exchange language did the shipper use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27c4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27c5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27c6. What mechanism(s) were used for communication between the emergency responders and the shipper? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

27c7. What data format was used for communication between the emergency responders and the shipper?

- Portable Document Format (pdf)

- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

 27c8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

 27c8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 27d. Was HM information provided electronically to... = Yes then Hide 27dd. If electronic data exchange was attempted b...
- If not 27d. Was HM information provided electronically to... = Yes then Hide 27d1. What information was transmitted electronic...
- If not 27d. Was HM information provided electronically to... = Yes then Hide 27d2. What device(s) did the carrier use to transm...
- If not 27d. Was HM information provided electronically to... = Yes then Hide 27d3. What electronic data exchange language did ...
- If not 27d. Was HM information provided electronically to... = Yes then Hide 27d4. What device(s) did the emergency responders ...
- If not 27d. Was HM information provided electronically to... = Yes then Hide 27d5. What electronic data exchange language did ...
- If not 27d. Was HM information provided electronically to... = Yes then Hide 27d6. What mechanism(s) were used for communicatio...
- If not 27d. Was HM information provided electronically to... = Yes then Hide 27d7. What data format was used for communication ...
- If not 27d. Was HM information provided electronically to... = Yes then Hide 27d8. How long did it take for the emergency resp...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Skip to Page 13
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27dd. If electronic data exchange was attempted b...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27d1. What information was transmitted electronic...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27d2. What device(s) did the carrier use to transm...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27d3. What electronic data exchange language did ...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27d4. What device(s) did the emergency responders ...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27d5. What electronic data exchange language did ...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27d6. What mechanism(s) were used for communicatio...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27d7. What data format was used for communication ...
- If 27d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27d8. How long did it take for the emergency resp...
- If not 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27dd. If electronic data exchange was attempted b...
- If 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27d1. What information was transmitted electronic...
- If 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27d2. What device(s) did the carrier use to transm...
- If 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27d3. What electronic data exchange language did ...
- If 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27d4. What device(s) did the emergency responders ...
- If 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27d5. What electronic data exchange language did ...
- If 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27d6. What mechanism(s) were used for communicatio...
- If 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27d7. What data format was used for communication ...
- If 27d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27d8. How long did it take for the emergency resp...
- If 27d8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 27d8a. Provide information, if available, on the ...

• If not 27d8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 27d8a. Provide information, if available, on the ...

 27d. Was HM information provided electronically to the emergency responders prior to their arrival at the scene by the carrier?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 27dd. If electronic data exchange was attempted but unsuccessful, please explain why:

27d1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

27d2. What device(s) did the carrier use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers

- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27d3. What electronic data exchange language did the carrier use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27d4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27d5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27d6. What mechanism(s) were used for communication between the emergency responders and the carrier? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

27d7. What data format was used for communication between the emergency responders and the carrier?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

 27d8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

 27d8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 27e. Was HM information provided electronically to... = Yes then Hide 27ee. If electronic data exchange was attempted b...
- If not 27e. Was HM information provided electronically to... = Yes then Hide 27e1. What information was transmitted electronic...
- If not 27e. Was HM information provided electronically to... = Yes then Hide 27e2. What device(s) did the other source use to t...
- If not 27e. Was HM information provided electronically to... = Yes then Hide 27e3. What electronic data exchange language did ...
- If not 27e. Was HM information provided electronically to... = Yes then Hide 27e4. What device(s) did the emergency responders ...
- If not 27e. Was HM information provided electronically to... = Yes then Hide 27e5. What electronic data exchange language did ...
- If not 27e. Was HM information provided electronically to... = Yes then Hide 27e6. What mechanism(s) were used for communicatio...
- If not 27e. Was HM information provided electronically to... = Yes then Hide 27e7. What data format was used for communication ...
- If not 27e. Was HM information provided electronically to... = Yes then Hide 27e8. How long did it take for the emergency resp...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Skip to Page 14
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27ee. If electronic data exchange was attempted b...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27e1. What information was transmitted electronic...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27e2. What device(s) did the other source use to t...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27e3. What electronic data exchange language did ...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27e4. What device(s) did the emergency responders ...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27e5. What electronic data exchange language did ...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27e6. What mechanism(s) were used for communicatio...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27e7. What data format was used for communication ...
- If 27e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 27e8. How long did it take for the emergency resp...
- If not 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27ee. If electronic data exchange was attempted b...
- If 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27e1. What information was transmitted electronic...
- If 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27e2. What device(s) did the other source use to t...
- If 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27e3. What electronic data exchange language did ...
- If 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27e4. What device(s) did the emergency responders ...
- If 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27e5. What electronic data exchange language did ...
- If 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27e6. What mechanism(s) were used for communicatio...
- If 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27e7. What data format was used for communication ...
- If 27e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 27e8. How long did it take for the emergency resp...
- If 27e8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 27e8a. Provide information, if available, on the ...

• If not 27e8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 27e8a. Provide information, if available, on the ...

 27e. Was HM information provided electronically to the emergency responders prior to their arrival at the scene by a source other than the driver/pilot/captain/conductor, PSAP dispatcher, shipper, or carrier?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 27ee. If electronic data exchange was attempted but unsuccessful, please explain why:

27e1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

27e2. What device(s) did the other source use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras

- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27e3. What electronic data exchange language did the other source use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27e4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

27e5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

27e6. What mechanism(s) were used for communication between the emergency responders and the other source? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

 27e7. What data format was used for communication between the emergency responders and the other source?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

 27e8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

 27e8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 28. Describe the electronic data exchange tha... = Yes then Hide 28aa. If electronic data exchange was attempted b...
- If not 28. Describe the electronic data exchange tha... = Yes then Hide 28a1. What information was transmitted electronic...
- If not 28. Describe the electronic data exchange tha... = Yes then Hide 28a2. What device(s) did the driver/pilot/captain/...
- If not 28. Describe the electronic data exchange tha... = Yes then Hide 28a3. What electronic data exchange language did ...
- If not 28. Describe the electronic data exchange tha... = Yes then Hide 28a4. What device(s) did the emergency responders ...
- If not 28. Describe the electronic data exchange tha... = Yes then Hide 28a5. What electronic data exchange language did ...
- If not 28. Describe the electronic data exchange tha... = Yes then Hide 28a6. What mechanism(s) were used for communicatio...
- If not 28. Describe the electronic data exchange tha... = Yes then Hide 28a7. What data format was used for communication ...
- If not 28. Describe the electronic data exchange tha... = Yes then Hide 28a8. How long did it take for the emergency resp...
- If 28. Describe the electronic data exchange tha... = No--An attempt was not made to provide HM information electronically. then

Skip to Page 15

• If 28. Describe the electronic data exchange tha... = No--An attempt was not made to provide HM information electronically. then Hide 28aa. If electronic data exchange was attempted b...

• If 28. Describe the electronic data exchange tha... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Skip to Page 15

• If not 28. Describe the electronic data exchange tha... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 28aa. If electronic data exchange was attempted b...

• If 28. Describe the electronic data exchange tha... is one of [u'1', u'2'] then Hide 28a1. What information was transmitted electronic...

• If 28. Describe the electronic data exchange tha... is one of [u'1', u'2'] then Hide 28a2. What device(s) did the driver/pilot/captain/...

• If 28. Describe the electronic data exchange tha... is one of [u'1', u'2'] then Hide 28a3. What electronic data exchange language did ...

• If 28. Describe the electronic data exchange tha... is one of [u'1', u'2'] then Hide 28a4. What device(s) did the emergency responders ...

• If 28. Describe the electronic data exchange tha... is one of [u'1', u'2'] then Hide 28a5. What electronic data exchange language did ...

• If 28. Describe the electronic data exchange tha... is one of [u'1', u'2'] then Hide 28a6. What mechanism(s) were used for communicatio...

• If 28. Describe the electronic data exchange tha... is one of [u'1', u'2'] then Hide 28a7. What data format was used for communication ...

• If 28. Describe the electronic data exchange tha... is one of [u'1', u'2'] then Hide 28a8. How long did it take for the emergency resp...

• If 28a8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 28a8a. Provide information, if available, on the ...

• If not 28a8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 28a8a. Provide information, if available, on the ...

 28. Describe the electronic data exchange that occurred with the emergency responders at the scene as part of the HM pilot test simulation: 28a. Was HM information provided electronically to the emergency responders at the scene by the driver/pilot/captain/conductor?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 28aa. If electronic data exchange was attempted but unsuccessful, please explain why:

28a1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM

- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

28a2. What device(s) did the driver/pilot/captain/conductor use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28a3. What electronic data exchange language did the driver/pilot/captain/conductor use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged

Unknown

28a4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28a5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28a6. What mechanism(s) were used for communication between the emergency responders and the driver/pilot/captain/conductor? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

28a7. What data format was used for communication between the emergency responders and the driver/pilot/captain/conductor?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28a8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes

31 to 60 minutes

More than one hour, please identify total time in HH:MM format: _____

 28a8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 28b. Was HM information provided electronically to... = Yes then Hide 28bb. If electronic data exchange was attempted b...
- If not 28b. Was HM information provided electronically to... = Yes then Hide 28b1. What information was transmitted electronic...
- If not 28b. Was HM information provided electronically to... = Yes then Hide 28b2. What device(s) did the PSAP dispatcher use t...
- If not 28b. Was HM information provided electronically to... = Yes then Hide 28b3. What electronic data exchange language did ...
- If not 28b. Was HM information provided electronically to... = Yes then Hide 28b4. What device(s) did the emergency responders ...
- If not 28b. Was HM information provided electronically to... = Yes then Hide 28b5. What electronic data exchange language did ...
- If not 28b. Was HM information provided electronically to... = Yes then Hide 28b6. What mechanism(s) were used for communicatio...
- If not 28b. Was HM information provided electronically to... = Yes then Hide 28b7. What data format was used for communication ...
- If not 28b. Was HM information provided electronically to... = Yes then Hide 28b8. How long did it take for the emergency resp...
- If 28b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Skip to Page 16
- If 28b. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 28bb. If electronic data exchange was attempted b...
- If 28b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Skip to Page 16
- If not 28b. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 28bb. If electronic data exchange was attempted b...
- If 28b. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28b1. What information was transmitted electronic...
- If 28b. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28b2. What device(s) did the PSAP dispatcher use t...
- If 28b. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28b3. What electronic data exchange language did ...
- If 28b. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28b4. What device(s) did the emergency responders ...
- If 28b. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28b5. What electronic data exchange language did ...
- If 28b. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28b6. What mechanism(s) were used for communicatio...
- If 28b. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28b7. What data format was used for communication ...
- If 28b. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28b8. How long did it take for the emergency resp...
- If 28b8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 28b8a. Provide information, if available, on the ...
- If not 28b8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 28b8a. Provide information, if available, on the ...

 28b. Was HM information provided electronically to the emergency responders at the scene by the PSAP dispatcher?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 28bb. If electronic data exchange was attempted but unsuccessful, please explain why:

28b1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

28b2. What device(s) did the PSAP dispatcher use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28b3. What electronic data exchange language did the PSAP dispatcher use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)

- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28b4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28b5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28b6. What mechanism(s) were used for communication between the emergency responders and the PSAP dispatcher? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

28b7. What data format was used for communication between the emergency responders and the PSAP dispatcher?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28b8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less

- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

 28b8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 28c. Was HM information provided electronically to... = Yes then Hide 28cc. If electronic data exchange was attempted b...
- If not 28c. Was HM information provided electronically to... = Yes then Hide 28c1. What information was transmitted electronic...
- If not 28c. Was HM information provided electronically to... = Yes then Hide 28c2. What device(s) did the shipper use to transm...
- If not 28c. Was HM information provided electronically to... = Yes then Hide 28c3. What electronic data exchange language did ...
- If not 28c. Was HM information provided electronically to... = Yes then Hide 28c4. What device(s) did the emergency responders ...
- ...
- If not 28c. Was HM information provided electronically to... = Yes then Hide 28c5. What electronic data exchange language did ...
- If not 28c. Was HM information provided electronically to... = Yes then Hide 28c6. What mechanism(s) were used for communicatio...
- If not 28c. Was HM information provided electronically to... = Yes then Hide 28c7. What data format was used for communication ...
- ...
- If not 28c. Was HM information provided electronically to... = Yes then Hide 28c8. How long did it take for the emergency resp...
- If 28c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Skip to Page 17
- If 28c. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 28cc. If electronic data exchange was attempted b...
- If 28c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Skip to Page 17
- If not 28c. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 28cc. If electronic data exchange was attempted b...
- If 28c. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28c1. What information was transmitted electronic...
- If 28c. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28c2. What device(s) did the shipper use to transm...
- If 28c. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28c3. What electronic data exchange language did ...
- If 28c. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28c4. What device(s) did the emergency responders ...
- If 28c. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28c5. What electronic data exchange language did ...
- If 28c. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28c6. What mechanism(s) were used for communicatio...
- If 28c. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28c7. What data format was used for communication ...
- If 28c. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28c8. How long did it take for the emergency resp...
- If 28c8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 28c8a. Provide information, if available, on the ...
- If not 28c8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 28c8a. Provide information, if available, on the ...

 28c. Was HM information provided electronically to the emergency responders at the scene by the shipper?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 28cc. If electronic data exchange was attempted but unsuccessful, please explain why:

28c1. What information was transmitted electronically? Please select all that apply:

Air Waybill Number

- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

28c2. What device(s) did the shipper use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28c3. What electronic data exchange language did the shipper use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28c4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28c5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28c6. What mechanism(s) were used for communication between the emergency responders and the shipper? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

28c7. What data format was used for communication between the emergency responders and the shipper?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28c8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

 28c8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 28d. Was HM information provided electronically to... = Yes then Hide 28dd. If electronic data exchange was attempted b...
- If not 28d. Was HM information provided electronically to... = Yes then Hide 28d1. What information was transmitted electronic...
- If not 28d. Was HM information provided electronically to... = Yes then Hide 28d2. What device(s) did the carrier use to transm...
- If not 28d. Was HM information provided electronically to... = Yes then Hide 28d3. What electronic data exchange language did ...
- If not 28d. Was HM information provided electronically to... = Yes then Hide 28d4. What device(s) did the emergency responders ...
- If not 28d. Was HM information provided electronically to... = Yes then Hide 28d5. What electronic data exchange language did ...
- If not 28d. Was HM information provided electronically to... = Yes then Hide 28d6. What mechanism(s) were used for communicatio...
- If not 28d. Was HM information provided electronically to... = Yes then Hide 28d7. What data format was used for communication ...
- If not 28d. Was HM information provided electronically to... = Yes then Hide 28d8. How long did it take for the emergency resp...
- If 28d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Skip to Page 18
- If 28d. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 28dd. If electronic data exchange was attempted b...
- If 28d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Skip to Page 18
- If not 28d. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 28dd. If electronic data exchange was attempted b...
- If 28d. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28d1. What information was transmitted electronic...
- If 28d. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28d2. What device(s) did the carrier use to transm...
- If 28d. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28d3. What electronic data exchange language did ...
- If 28d. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28d4. What device(s) did the emergency responders ...
- If 28d. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28d5. What electronic data exchange language did ...
- If 28d. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28d6. What mechanism(s) were used for communicatio...
- If 28d. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28d7. What data format was used for communication ...
- If 28d. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28d8. How long did it take for the emergency resp...
- If 28d8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 28d8a. Provide information, if available, on the ...
- If not 28d8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 28d8a. Provide information, if available, on the ...

 28d. Was HM information provided electronically to the emergency responders at the scene by the carrier?

- Yes
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 28dd. If electronic data exchange was attempted but unsuccessful, please explain why:

28d1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

28d2. What device(s) did the carrier use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28d3. What electronic data exchange language did the carrier use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged

Unknown

28d4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28d5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28d6. What mechanism(s) were used for communication between the emergency responders and the carrier? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

28d7. What data format was used for communication between the emergency responders and the carrier?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28d8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes

More than one hour, please identify total time in HH:MM format: _____

 28d8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28ee. If electronic data exchange was attempted b...
- If not 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28e1. What information was transmitted electronic...
- If not 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28e2. What device(s) did the other source use to t...
- If not 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28e3. What electronic data exchange language did ...
- If not 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28e4. What device(s) did the emergency responders ...
- If not 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28e5. What electronic data exchange language did ...
- If not 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28e6. What mechanism(s) were used for communicatio...
- If not 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28e7. What data format was used for communication ...
- If not 28e. Was HM information provided electronically to... = Yes, identify source: then Hide 28e8. How long did it take for the emergency resp...
- If 28e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Skip to Page 19
- If 28e. Was HM information provided electronically to... = No--An attempt was not made to provide HM information electronically. then Hide 28ee. If electronic data exchange was attempted b...
- If 28e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Skip to Page 19
- If not 28e. Was HM information provided electronically to... = No--An attempt was made to provide HM information electronically, but it was unsuccessful. then Hide 28ee. If electronic data exchange was attempted b...
- If 28e. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28e1. What information was transmitted electronic...
- If 28e. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28e2. What device(s) did the other source use to t...
- If 28e. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28e3. What electronic data exchange language did ...
- If 28e. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28e4. What device(s) did the emergency responders ...
- If 28e. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28e5. What electronic data exchange language did ...
- If 28e. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28e6. What mechanism(s) were used for communicatio...
- If 28e. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28e7. What data format was used for communication ...
- If 28e. Was HM information provided electronically to... is one of [u'1', u'2'] then Hide 28e8. How long did it take for the emergency resp...
- If 28e8. How long did it take for the emergency resp... is one of [u'0', u'1', u'2', u'3', u'4'] then Hide 28e8a. Provide information, if available, on the ...
- If not 28e8. How long did it take for the emergency resp... = More than one hour, please identify total time in HH:MM format: then Hide 28e8a. Provide information, if available, on the ...

 28e. Was HM information provided electronically to the emergency responders at the scene by a source other than the driver/pilot/captain/conductor, PSAP dispatcher, shipper, or carrier?

- Yes, identify source: _____
- No--An attempt was not made to provide HM information electronically.
- No--An attempt was made to provide HM information electronically, but it was unsuccessful.

 28ee. If electronic data exchange was attempted but unsuccessful, please explain why:

28e1. What information was transmitted electronically? Please select all that apply:

- Air Waybill Number
- Basic description the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- None
- Unknown
- Other, please describe: _____

28e2. What device(s) did the other source use to transmit the information to the emergency responders? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28e3. What electronic data exchange language did the other source use to transmit the information to the emergency responders?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28e4. What device(s) did the emergency responders use to receive the information? Select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- None, no technology available
- Unknown

28e5. What electronic data exchange language did the emergency responders use to receive the information?

- Extensible Markup Language (XML)
- Universal Business Language (UBL)
- Electronic Data Interchange (EDI)
- United Nations/Electronic Data Interchange For Administration, Commerce and Transport (UN/EDIFACT)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28e6. What mechanism(s) were used for communication between the emergency responders and the other source? Select all that apply:

- Email
- Direct device-to-device transmission
- Internet reference/link
- Facsimile (FAX) document
- Audio transmission (e.g., via phone, radio, etc.)
- Other, please identify: _____
- None, no communication occurred
- Unknown

28e7. What data format was used for communication between the emergency responders and the other source?

- Portable Document Format (pdf)
- Tagged Image File Format (tiff)
- Joint Photographic Experts Group (jpeg)
- Other, please identify: _____
- None, no electronic data was exchanged
- Unknown

28e8. How long did it take for the emergency responders to receive the information from the time it was first requested?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- More than one hour, please identify total time in HH:MM format: _____

4 28e8a. Provide information, if available, on the reason for the delay in receipt of information:

Branching Information

- If 29. Was the information collected electronically ... = No then Skip to Page 20
- If not 29. Was the information collected electronically ... = Yes then Hide 30. Did the emergency responders review the HM da...
- If not 29. Was the information collected electronically ... = Yes then Hide 31. Did the electronic information match that rec...
- If not 29. Was the information collected electronically ... = Yes then Hide 32. Did the electronic information accurately ref...
- If not 29. Was the information collected electronically ... = Yes then Hide 33. Did your agency/organization identify any ben...
- If not 30. Did the emergency responders review the HM da... = Yes then Hide 30a. Describe the process the emergency responder...
- If not 31. Did the electronic information match that rec... = No then Hide 31a. Describe the discrepancies:
- If not 32. Did the electronic information accurately ref... = No then Hide 32a. Describe the discrepancies:
- If not 33. Did your agency/organization identify any ben... = Yes then Hide 33a. Which of the following benefits related to e...
- If not 33. Did your agency/organization identify any ben... = Yes then Hide 33b. Describe the benefit(s):

 29. Was the information collected electronically by the emergency responders during the HM simulation?

- Yes
- No

 30. Did the emergency responders review the HM data received electronically during the simulation for accuracy and completeness?

- Yes
- No
- Unknown

 30a. Describe the process the emergency responders used for data validation:

 31. Did the electronic information match that recorded on the hardcopy shipping paper?

- Yes
- No
- Unknown

 31a. Describe the discrepancies:

 32. Did the electronic information accurately reflect the details of the HM being transported?

- Yes
- No
- Unknown

 32a. Describe the discrepancies:

 33. Did your agency/organization identify any benefits related to e-system components during the simulation?

- Yes
- No

33a. Which of the following benefits related to e-system components were identified during the simulation? Please select all that apply:

- Benefits regarding electronic/wireless devices used
- Benefits associated with the data language (e.g., XML, EDI, etc.) used
- Benefits in the communication mechanism (e.g., email, Internet reference/link, etc.) utilized
- Benefits associated with the data format (e.g., jpeg, tiff, etc.) used
- Benefits associated with the time required to receive the shipping paper information
- Other, please identify: _____

 33b. Describe the benefit(s):

Branching Information

- If not 34. Did your agency/organization identify any e-s... = Yes then Hide 34a. Which of the following e-system impediments/...
- If not 34. Did your agency/organization identify any e-s... = Yes then Hide 34b. Describe the impediment(s)/limitation(s):
- If not 34. Did your agency/organization identify any e-s... = Yes then Hide 34c. Explain how your agency/organization address...

 34. Did your agency/organization identify any e-system impediments/limitations during the simulation?

- Yes
- No

34a. Which of the following e-system impediments/limitations were identified during the simulation? Please select all that apply:

- Lack of electronic access in rural areas
- Incompatibility issues with other internal or external e-systems
- Problems with electronic/wireless devices
- Problems with the data language (e.g., XML, EDI, etc.)
- Problems with the communication mechanism (e.g., email, Internet reference/link, etc.)
- Problems with the data format (e.g., jpeg, tiff, etc.)
- Other, please describe: _____

 34b. Describe the impediment(s)/limitation(s):

 34c. Explain how your agency/organization addressed the impediment(s)/limitation(s):

Branching Information

- If not 35. Was the information included within the elect... = No then Hide 35a. What other information was needed to identif...
- If not 37. Is training needed to conduct electronic tran... = Yes then Hide 37a. Please describe needed training:
- If not 38. Is additional equipment needed to conduct ele... = Yes then Hide 38a. Please describe additional equipment needed:
- If not 39. Do you have any lessons learned that should b... = Yes then Hide 39a. Please describe the lessons learned:

 35. Was the information included within the electronic transmittal sufficient, and equivalent to the hardcopy shipping paper, to identify the hazards and properly respond to the HM simulation?

- Yes
- No

 35a. What other information was needed to identify the hazards and to properly respond to the HM simulation?

 36. How do you feel the e-information satisfied the required HM paper documentation (e.g., shipping paper, transportation of dangerous goods manifest, bill of lading, notification to pilot in command, etc.)?

- Fully
- Mostly
- Partially
- Not at all

 37. Is training needed to conduct electronic transfers of information for responders?

- Yes
- No

 37a. Please describe needed training:

 38. Is additional equipment needed to conduct electronic transfers of information for emergency response?

- Yes
- No

 38a. Please describe additional equipment needed:

 39. Do you have any lessons learned that should be considered for improvement of the use of e-shipping papers in HM commerce?

- Yes
- No

 39a. Please describe the lessons learned:

40. What benefits do you think an e-system would offer over a paper-based system for your agency/organization? Please select all that apply:

- Reduced staff time and/or cost to prepare shipping papers
- Reduced costs for transfer between modes or carriers
- Reduced error rate in data entry
- Ease of data entry

- Reduced costs for hardcopy storage and retrieval
- Faster transport times for shipments
- Improved customer satisfaction
- Reduced insurance or risk management costs
- No benefits
- Other, please describe: _____

 41. How do you believe e-systems will impact the time to respond to an HM incident?

- Positively
- Negatively
- No impact
- Other, please explain: _____