

Go Back to Hazard Summary

Warning Signs and Symptoms

- New or Strange Noises Coming From Vehicle
- Loss of Power
- Older and Less Reliable Vehicle
- Poor Road Conditions

Causes

- Mechanical Problem, Bad Gas, No Oil, No Gas, ...

Potential Effects

- Stranded At Site With Vehicle

Mitigation

- Carry Radio / Cell Phone
- Use Vehicles in Pairs for Long Distance
- Properly Maintain Vehicle
- Carry Tool Kit in Vehicle
- Carry Spare Tire / Changing Tools
- Carry Emergency Road Flares / Breakdown Kit
- Carry Spare Water / Food / Clothing In Vehicle for Long Duration Trip
- Carry Extra Supplies if High Possibility Of Poor Road Conditions
- Preplan Route and Estimated Time for Checkin
- Regular Communications With Command Area
- Use Local Knowledge of Area If Available
- Maps or Charts of Area
- Navigation Training
- Preplan Emergency Locations for Repair

Tasks Needed

- Preplanning on Use of Center Vehicle (Breakdown Kit, Food, Water, ...)
- Preplan Off Center Breakdown Protocol (Find Out More of What It Is)

Flood Water Floats Vehicle

Go Back to Hazard Summary

Warning Signs and Symptoms

- Flooding

- Water Covers Road

- Moving Water

- Poor or Unknown Road Conditions

- Dark or Poor Visibility

- Cut Off From Area or Sense of Urgency

Causes

- Vehicle Driven Into Water. Water Floats Vehicle And Current Pushes Vehicle Over Or Floats Downstream

Potential Effects

- Loss of Vehicle. Death. Trauma

Mitigation

- Fore Knowledge of Road Conditions

- Use Alternate Route

- Know Allowable Water Depth for Driving

- Check Conditions Before Driving Across Moving Water

- Check Depth of Water and Road Condition Before Driving Across

- Use Extreme Caution Before Using Questionable Bridge At High Water

- Training In How Vehicle Can Float in Moving Water

- Wait for Water To Subside

- Turn Off Water Flow If Able - Controlled Water Release

- Mark Hazardous Crossing Areas (Command and On Site)

- Use Local Knowledge of Area If Available

- Use Maps or Charts of Area

Tasks Needed

- Written Protocol on Crossing Flooded Areas

- Training on Checking Out for Crossing Flooded Area

Go Back to Hazard Summary

Warning Signs and Symptoms

- Wet or Oily Road
- Poor Visibility
- Poor Maintenance on Vehicle (Lights, Tires, Brakes)
- Tired or Distracted Driver
- Lost Driver
- High Rate of Speed
- Sense of Urgency to Reach Goal
- Towing Trailer
- Heavily Loaded Vehicle
- Misadjusted Mirrors and / or Can't See Well Out Side Windows

Causes

- Vehicle Strikes Fixed Object or Another Vehicle. Or Is Struck by Another Vehicle

Potential Effects

- Loss of Vehicle. Death. Trauma

Mitigation

- Fore Knowledge of Road Conditions
- Drive Safely For Conditions
- Obey Posted Speed and Warnings
- Towing Practice
- Person Watching Trailer When Backing Up - Spotter
- Proper Maintenance of Vehicle
- Use of NASA Standards for Vehicle Use
- Use of Seat Belts
- Use of Rested Driver, Passenger to Watch With Driver If Needed
- Good Navigation or Directions
- Wait or Make Trip Later When Conditions Better
- Emergency Equipment in Vehicle

Tasks Needed

- Better Documentation of NASA Driving Standards
- Towing Practice
- Better Navigation / Preplanning

Trailer Breaks Free From Tow

Go Back to Hazard Summary

Warning Signs and Symptoms

- Incorrect Ball / Hitch Attachment
- Inexperienced Person Hooking Up Trailer
- Lack of Grease on Hitch
- Lack of Lock on Hitch
- Missing / Broken Safety Chains on Hitch

Causes

- Trailer Breaks Free of Tow Vehicle

Potential Effects

- Traffic Accident, Loss of Equipment

Mitigation

- Training on Hookup of Trailer
- Standard Ball / Hitch and Light Hookup for Water Rescue
- Drive Safely For Conditions
- Obey Posted Speed and Warnings
- Towing Practice
- Proper Maintenance of Trailer
- Use of NASA Standards for Vehicle Use
- Use of Locks on Tow Hitch
- Use of Safety Chains on Tow Hitch

Tasks Needed

- Better Documentation of NASA Driving Standards
- Towing Practice
- Towing Checklist - Fixed to Trailer

Go Back to Hazard Summary

Warning Signs and Symptoms

- Loose Parking Brake
- Lack Of Wheel Stops
- Parked on Slope
- Slippery Conditions
- Trailer Unhooked From Tow Vehicle

Causes

- Tow Vehicle or Trailer Rolls Uncontrolled When Parked

Potential Effects

- Traffic Accident

Mitigation

- Use of Chocks On Wheels
- Use of Parking Brake
- Current Maintenance on Truck / Trailer
- Leave Trailer Hooked to Tow Vehicle
- Park on Level Ground or Parallel to Slope (Slight)
- Use of NASA Standards for Vehicle Use

Tasks Needed

- Better Documentation of NASA Driving Standards
- Premade Wheel Chocks for Trailers
- Towing Checklist

Key Locked In - Unavailable

Go Back to Hazard Summary

Warning Signs and Symptoms

- Multiple Entry and Exit From Vehicle
- Leaving Vehicle Without Driver
- Multiple People In and Out of Vehicle
- Disorganized or Hurried Response
- Vehicle Driver Assignment Ambiguous
- Cold Or Rainy Weather (Windows Up)
- Darkness

Causes

- Key Locked in Vehicle, Key Lost, Person Leaves With Key

Potential Effects

- Locked Out of Vehicle, Transportation or Equipment Unavailable

Mitigation

- Designated Driver In Charge of Keys
- Motor Pool Contact for Spare Keys
- Storage Location in Shallow Water Trailer for Vehicle Keys (Key Box)
- Break Window If Key Locked In Vehicle and Emergency - Use PPE
- Roll Down Window If Multiple People and / or Entry / Exit From Vehicle
- Don't Lock Doors Until Ready to Depart (Confirm Key Location First)
- Radio Carried by All Groups Leaving Staging Areas
- Driver / Responsible Person Stays With Vehicles

Tasks Needed

- Driver Checksheet for Vehicles With SOP
- Storage Location in Shallow Water Trailer for Vehicle Keys (Key Box)