

# Volusia County Fire Services Safety Gram



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## L.C.E.S. CHECK LIST

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There are several elements needed in a wildfire environment to ensure the safety of firefighters. The fundamental elements of this process are lookouts, communication, escape routes, and safety zones (LCES). This system is put in place before fighting the fire. Select a lookout or lookouts, set up a communication system, choose escape routes, and select a safety zone or zones.

LCES is a self-triggering mechanism. Lookouts assess and reassess fire conditions and communicate those threats to safeguard firefighter crews. Firefighter crews should use escape routes to move to safety zones.

LCES is built on two basic guidelines:

1. Before safety is threatened, each firefighter must know how the LCES system will be used.
2. The LCES system must be continuously re-evaluated as conditions change.

- **Lookouts**
  - Experienced/competent/trustworthy
  - Enough lookouts at good vantage points
  - Knowledge of crew location
  - Knowledge of escape and safety locations
  - Map/weather kit/watch/IAP
- **Communication**
  - Radio frequencies confirmed
  - Backup and check-ins established
  - Update on any situation change
  - Sound alarm early, not late
- **Escape Routes**
  - More than one escape route
  - Scout: soil/rock/steep/vegetation
  - Time: slowest person/fatigue and temp factors
  - Marked: flagged for day or night
- **Safety Zones**
  - Survivable without a fire shelter tent
  - Natural: clean burn/rock area/water
  - Man-made: constructed sites/clear-cut/roads
  - Vehicle for escape
  - Scouted for size and hazards
  - Close enough considering escape time
  - Upslope? = more heat impact = larger safety zone
  - Downwind? = more heat impact = larger safety zone
  - Heavy fuels? = more heat impact = larger safety zone

### Dispersion level Chart

Dispersion Range 0-40 is stable air, low fire intensity, less long range spotting.

Dispersion Range 41-70 is moderate unstable air, increased fire intensity and long range spotting.

Dispersion Range 70+ is unstable air, high amount of upper lifting, intense fire activity, potential for long range spotting and plume dominated wildfires.

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**F**ight fire aggressively, but provide for safety first.

**I**nitiate all action based on current and expected fire behavior.

**R**ecognize current weather conditions and obtain forecasts.

**E**nsure instructions are given and understood.

**O**btain current information on status.

**R**emain in communication with crewmembers, your supervisor, and adjoining forces.

**D**etermine safety zones and escape routes.

**E**stablish lookouts in potentially hazardous situations.

**R**emain in control at all times.

**S**tay alert, keep calm, act decisively.

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