

#### FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 (970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

# Unconscious Victim Ladder Rescue (1.1)

Developed by Firefighter Ricky Summer
December 2011

NFPA 1001

# TASK SKILL DESCRIPTION AND DETAIL

- Ladder rescues
  - Involve considerable risk of injury
  - o Require proper technique and physical strength and stamina
  - Should be used only when it is not possible to use interior stairways or fire escapes

## PREPARING FOR THE RESCUE

- Reference the ground ladder chapter
  - The fire fighter will place the ladder into the rescue position with the tip of the ladder just below the windowsill
  - The ladder should be placed at a wider angle to assist with lower the victim to the ground
- Clear the window of all obstructions (i.e. glass, blinds, sashes)
- Remove any obstructions underneath the window
- Operation will require a minimum of three (3) firefighters
  - One (1) firefighter removing the victim out of the window
  - o One (1) firefighter on the ground ladder
  - o One (1) firefighter healing the ground ladder



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 (970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

## VICTIM HANDLING METHODS

- Head first method (one firefighter)
- Feet first method (two firefighters)
- Feet first method modified Langvart (two firefighters)
- The interior crew will dictate the orientation and positioning of the victim on the ground ladder

#### **Head First Method**

- Drag the victim into position (see Figure 1)
- The victim will be facing towards the window with their legs bent, feet flat on the floor, and feet against the wall (see Figure 2)
- The firefighter will lift the victim and place a leg between the victim's leg (see Figure 3)
- Push the victim against the windowsill
- Fold the victim at the waist
- Coordinate with the firefighter on the ladder to ensure proper victim handling out of the window (see Figure 4)



Figure 1



FIRE AND RESCUE DEPARTMENT
410 E. Fifth Street • Loveland, Colorado 80537
(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144



Figure 2



Figure 3



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 FAX (970) 962-2912 • TDD (970) 663-5144 (970) 962-2471 •



Figure 4

## **Feet First Method**

- Drag the victim into position (see Figure 1)
- The victim's legs are placed on the window sill with their butt up against the wall (see Figure 5)
- Each firefighter will place an arm under the waist and an arm under the head (see Figure 6)
- The command is "Ready, Move!"
- Victim is lifted up and out of the window (see Figure 7)



Figure 5



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 (970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144



Figure 6



Figure 7 - Passing the victim through the window



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 (970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

## Feet First Method - Modified Langvart

- Drag the victim into position (see Figure 1)
- The victim is angled under the window with their head against the wall (see Figure 8)
- Roll the victim up onto the shoulders (see Figures 9 and 10)
- Roll the victim up and out of the window (see Figure 11)

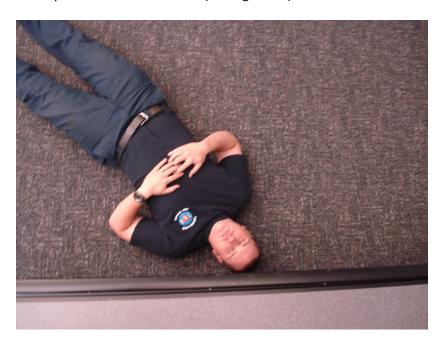


Figure 8



FIRE AND RESCUE DEPARTMENT
410 E. Fifth Street • Loveland, Colorado 80537
FAX (970) 962-2912 • TDD (970) 663-5144 (970) 962-2471 •



Figure 9



Figure 10



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537

(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144



Figure 11

## **VICTIM REMOVAL DOWN A LADDER**

Using the techniques listed below, the ladder will absorb about 60 percent of the victim's body weight weight the firefighter won't have to contend with. Additionally, the ladder will provide friction, preventing the victim from sliding down the ladder too quickly. Should there be any problem during the ladder rescue evolution, the firefighter should lean/pull himself into the ladder to secure the victim between his body and the ladder.

WARNING: An unconscious victim who regains consciousness may grab the ladder or the rescuer. It is critical that any firefighter rescuing an unconscious victim down a ladder observe the victim and be prepared to respond if the victim regains consciousness.



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 FAX (970) 962-2912 • TDD (970) 663-5144 (970) 962-2471 •

## **Cross the Body Method** (see Figure 12)

- Position the victim facing towards the ladder
- One arm is placed under the armpit to cradle the torso of the victim
- One arm is placed between the legs
- The victim is positioned at a slight angle with the torso higher than the legs
- Ensure the victim is secure before proceeding down the ladder



Figure 12 - Cross the body method

FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street . Loveland, Colorado 80537

(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

## **Knee-to-Knee Method** (see Figure 13)

- The firefighter will stand on two separate rungs so one foot is higher than the other
- Position the legs of the victim to the outside of the beams
- Place both arms securely under the armpits of the victim
- Victim is lowered knee to knee



Figure 13 - Victim facing the rescuer

## **Over-the-Shoulder Method**

- The firefighter will stand in a position where their shoulders are even with or below the windowsill
- Position the legs of the victim over both shoulders (victim facing towards the firefighter)
- Place both arms securely around the legs of the victim

## TAKING A VICTIM DOWN THE LADDER

- One step at a time
- When using the knee-to-knee method, do not allow the weight of the victim to rest on your leg by keeping the ball of your foot on the rung versus the arch your foot (see Figure 13)
- Maintain control of the victim by using the support of the ladder and your upper body
- Press the victim to the ladder if they regain consciousness and become combative
- Talk to the victim



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537

(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

## **RESCUING A LARGER ADULT**

- Use ladders of the same height to ensure a similar climbing angle
- Place and secure two ladders, side-by-side, in the rescue position
- Multiple fire fighters may be required to enter the window to assist with removing the victim from the structure
- Two fire fighters, one on each ladder, should climb up to the window opening and wait for the victim
- When ready, the victim should be lowered down across the arms of the fire fighters, with one supporting the victim's legs and the other supporting the victim's torso (see Figure 14)
- Once in place, the fire fighters can slowly descend the ladder in unison and using both hands to hold onto the ladder rungs



Figure 14



#### FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 (970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

# TASK SKILL INSTRUCTIONAL REQUIREMENTS AND IMPLEMENTATION

## **LFR Training Materials**

• Basic ladder skills should be proficient prior to attempting rescue techniques

#### PPE

- Full structural PPE shall be used in all ladder trainings
- SCBA

## **Evaluation/ Associated JPR's**

- Evaluation will be accomplished by the instructors and company officers
- JPR's
  - 01110 Set Up Ground Ladders
  - 01121 Search And Rescue

## Safety

- Safety is of upmost concern in any and all training evolutions
- All safety concerns shall be dealt with immediately and appropriately

## REFERENCE INFORMATION

- Jones & Bartlett PP Fundamentals of Fire Fighter Skills
- IFSTA Essentials of Firefighting 5<sup>th</sup> Edition