


Community Emergency Response Team



Cribbing

Released: 16 April 2025 **Contra Costa CERT Coalition**

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Community Emergency Response Team


- 👤 Personal safety is ALWAYS the number one priority
- 👤 Show up prepared
 - Wear appropriate clothing and footwear, have WATER
 - Wear PPE - your personal protective equipment ...gloves, helmet, goggles, mask, boots, etc.
 - Have at least one communications device: cell, radio, etc.
- 👤 Work as a team
- 👤 Size-up - maintain situational awareness
- 👤 The CERT goal is to do the **Greatest Good for the Greatest Number**
- 👤 *Hope for the best but plan for the worst!*

Visual CRIB.1 **Contra Costa CERT Coalition** 16

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Unit Objectives

 Use safe techniques for debris removal and victim extrication using a lever and cribbing



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Leveraging and Cribbing Operations



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Cribbing Planning and Staging

- 👤 Conduct a Size-up of the scene
- 👤 Have one person in charge and formulate an action plan
- 👤 Gather necessary materials for leveraging (lifting) and cribbing operations



Visual CRIB.4

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Crush Syndrome

- 👤 Crush syndrome is a medical condition that dictates whether a victim should be removed from a crushing load
- 👤 A crush injury is the result of a body part, usually an extremity, being subjected to a high degree of pressure
- 👤 At crush release, the products of muscle breakdown are reperfed into the blood and are circulated. The person may suffer major shock, renal failure, or heart attack and death may occur
- 👤 If a crush has been in effect for 30 minutes or more, Crush Syndrome Protocol must be observed.

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Crush Syndrome Protocol - 1

Presuming No Professional Rescuers are available and Victim must be extricated before EMS can respond:

If crush is to torso, stabilize scene with cribbing, if possible, and inform victim that:

- 👤 Removing the crush could be life-threatening
- 👤 Victim must be left in crush until advanced help is available
- 👤 CERTs do not have needed drugs or skills to counteract crush induced blood contaminates during reperfusion
- 👤 Additional Professional EMS help will be summoned

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Crush Syndrome Protocol - 2

If crush is to extremities and cause of entrapment can be stabilized with cribbing, volunteers may attempt to extricate by strictly adhering to the following protocol:

- 👤 Make plan to transport to trauma center
- 👤 < 30 minutes, consider tourniquet/s
- 👤 ≥ 30 minutes, utilize tourniquet/s
- 👤 Immediately prior to extrication, apply two tourniquets to crushed extremities, proximal to crush, if possible
- 👤 Extricate victim
- 👤 Transport to Advanced Medical Care immediately

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Leveraging and Cribbing Operations

- When a large object such as a collapsed wall or heavy debris needs to be moved in order to free victims, leverage and cribbing may be used.
 - > **Leverage** is obtained by wedging a lever (pole or other long object) under the object that needs to be moved with a stationary object underneath it to act as a fulcrum. When the lever is forced down over the fulcrum, greater force is obtained to lift the object.
 - > **A crib** is a framework of wooden, plastic or metal bars used for support or strengthening. *Box cribbing* means arranging pairs of wood pieces alternately to form a stable rectangle. In a disaster situation, debris may be available to use for cribbing.
- Leveraging and Cribbing are **Perishable Skills** and must be practiced regularly

Visual CRIB.8

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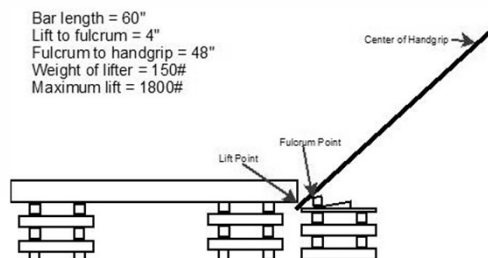
8

Leveraging

- Lever Defined: A rigid bar, either straight or bent, that is free to move on a fixed point called a fulcrum
- A lever works by transferring a force from one place to another while at the same time changing the direction of the force



Clallam County Technical Rescue Team photo



Visual CRIB.9

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Leveraging

Lift an inch, Crib an inch

- 👤 Stabilize the object to be lifted
- 👤 Initiate the lift using the lever and fulcrum for mechanical advantage
- 👤 Have someone available to handle the victim
- 👤 As the object is lifted, add cribbing as needed; build on the foundation of the box crib
- 👤 When the object is adequately supported, the victim may be removed

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Cribbing

24,000 lbs. total if load is supported by 4 joints

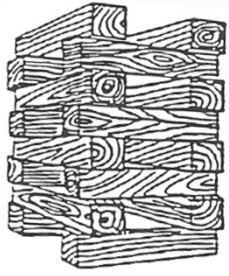
54,000 lbs. total if load is supported by 9 joints

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Cribbing

- 👤 Wood fails at cut ends first
- 👤 Overlap ends by width of member - 4x4 = 3.5" overlap
- 👤 Don't crib higher than three times the footprint (width) of the crib
- 👤 Load needs to be supported with wood-to-wood contact all the way to the ground





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Cribbing

- 👤 Shims are used to match the angle of a surface
- 👤 Shims balance the load by ensuring even contact

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Cribbing

- 👤 Wedges, inserted as Married Pairs, are used as variable height crib members
- 👤 Wedges can be used as Inclined Planes to prevent sliding movement
- 👤 **Single wedges can be used for *temporary* stabilization until flat pieces can be inserted**

“MARRYING” Wedges

The diagram shows two scenarios for using wedges. On the left, labeled 'RIGHT', two wedges are joined together to form a flat, stable top surface. On the right, labeled 'WRONG', a single wedge is used as a temporary support, which is unstable and can slide.

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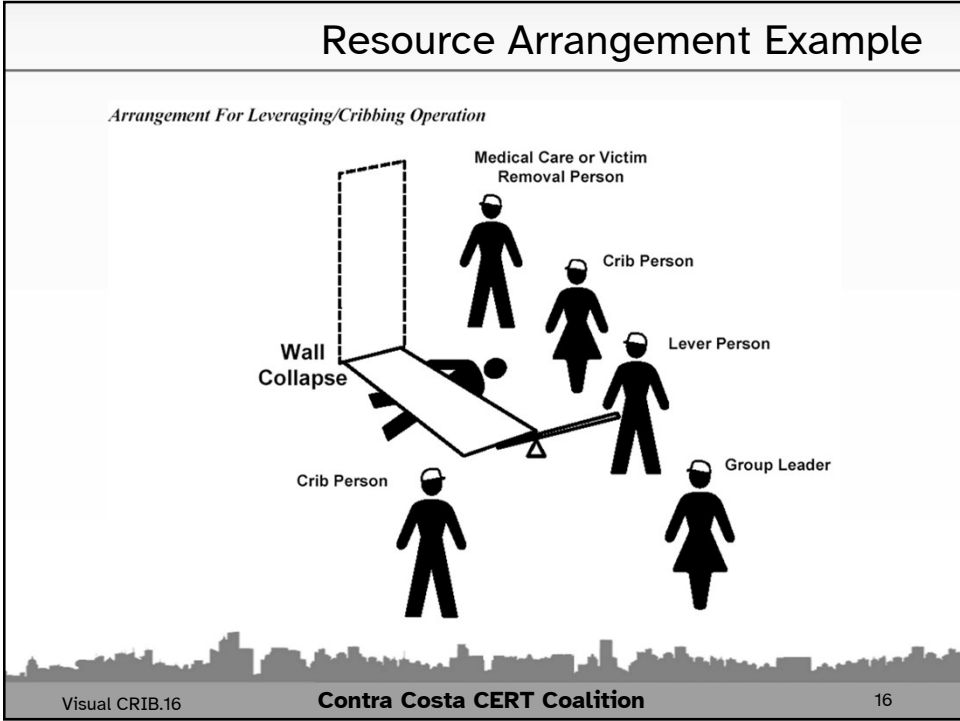
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Cribbing Checklist

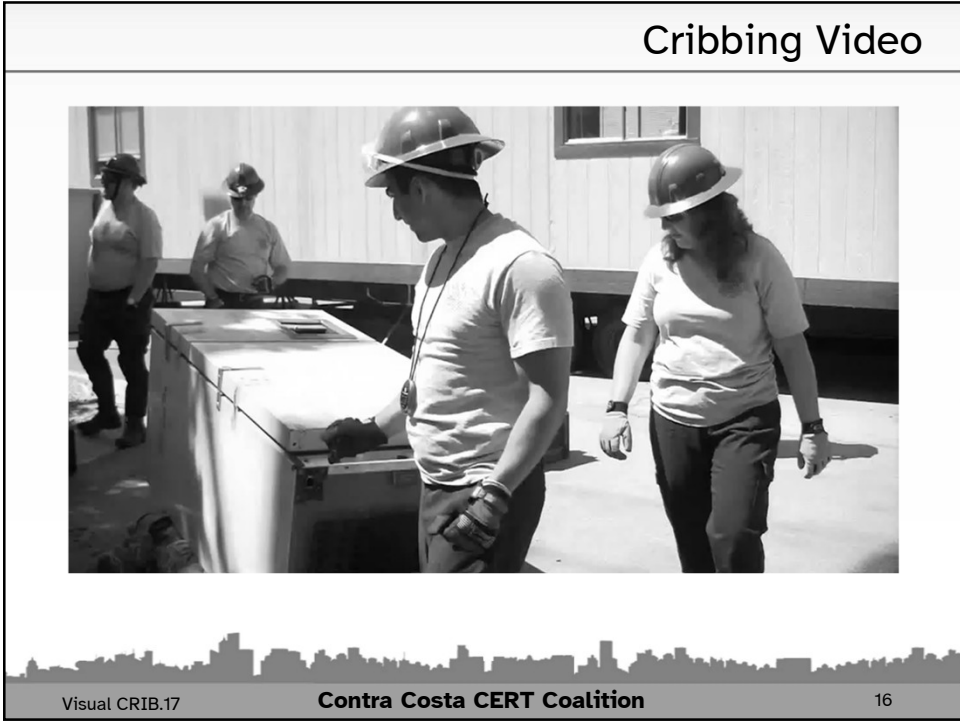
- 👤 Safety is most important
- 👤 Size-up the situation
- 👤 Stabilize the load
- 👤 Remove debris
- 👤 Raise the load
- 👤 Rescue the victim
- 👤 Lower the load
- 👤 Keep hands and toes clear of the load at all times!

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Questions ?



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The image is a slide titled "Questions ?" in the top right corner. The main content is a large, dense pile of question marks of various sizes and orientations, some in white on dark backgrounds and some in dark on light backgrounds. At the bottom of the slide, there is a dark grey silhouette of a city skyline. Below the skyline, the text "Visual SAR.18" is on the left and "Contra Costa CERT Coalition" is on the right.

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