Trade Safety Series:  
Using Power Tools Safely -  
Circular Saw

About the Video:
Master builder Todd Newman shares his 20+ years experience as a very safe builder, showing and explaining the best practice when it comes to the safe use of power tools. In this program we examine the most common injuries from circular saws and the best ways to eliminate risk.

Year of Production: 2014
Total length of video: 4.16
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Timeline

00.00 Introduction and Injuries

01.07 Preparation; power disconnected, check attachments, check base plate, check blade, check safety guard

01.30 Set up; timber can fall away, good position.

01.55 Dangers of electricity; cutting power lead, circuit breaker, tagged leads.

02.30 Personal Protection Equipment; eyes, ears, steel-capped boots

02.40 Assess job, area, material, cut straight line.

02.56 Secure material

3.00 Base plate horizontal

03.08 Cutting; blade up to speed, use two hands, space in front clear, let blade stop completely.

03.40 Good process in action
Learning Activities

For consideration prior to viewing:

These activities can be undertaken with participants working individually or in one or more small groups. They are designed so responses can be made in different ways, including brainstorming, discussion, written responses, role-plays etc.

1. Pair students up. Ask them to brainstorm and list all the dangers students can think of posed by a circular saw in a construction site. Compile the list as a class. What did they identify? What did they not identify? Discuss.

2. Ask students to research all the possible injuries circular saw. Discuss instances where these injuries are most likely to occur.

3. As a hypothetical exercise, ask students to imagine that they are in charge of safety at a construction site. Ask students to design a safety campaign to minimize injuries from circular saws. Think visual (e.g. posters), verbal (e.g. toolbox meetings) and administrative (process regulation).
Questions about the video:

1. What is the main type of injury that can occur using circular saws?
   ________________________________________________________________

2. In preparation, what five things should you check?
   1. ________________________________________________________________
   2. ________________________________________________________________
   3. ________________________________________________________________
   4. ________________________________________________________________
   5. ________________________________________________________________

3. Make sure that the timber can _______ _______.

4. Check the switchboard for a _______ _______.

5. What does Todd say is essential PPE?
   1. ________________________________________________________________
   2. ________________________________________________________________
   3. ________________________________________________________________

6. What are the three things you should assess?
   1. ________________________________________________________________
   2. ________________________________________________________________
   3. ________________________________________________________________

7. When you’ve finished cutting be sure to wait for the saw to _______ completely.

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Questions about the video: Answer key.

1. What are the main type of injuries that can occur using circular saws?
   A: Sever lacerations

2. In preparation, what five things should you check?
   A: 1) Power is disconnected 2) Attachments 3) Base plate 4) Blade 5) Safety guard

3. Make sure that the timber can _______ _________ .
   A. Fall away.

4. Check the switchboard for a _______ _________ .
   A: Circuit breaker

5. What does Todd say is essential PPE?
   A: 1) Eyes 2) Ears 3) Steel-capped boots

6. What are the three things you should assess?
   A: 1) The job 2) The area 3) The material

7. When you’ve finished cutting be sure to wait for the saw to ___________ completely.
   A: Stop
Follow-up activities

These activities can be undertaken with participants working individually or in one or more small groups. They are designed so responses can be made in different ways, including brainstorming, discussion, written responses, role-plays etc.

1. Familiarize yourself with all the safety aspects of a circular saw. Check to see that the safety guard is working freely.

2. Research the best ways that you should set up a piece of wood to cut it.

3. Research the different attachments and blades available, and how they match up with the right circular saw for wood, metal or concrete.
**Suitable resources**

Equipment and machinery resources (range of material available from this page)


Jackhammers:


Building and Construction Industry Guidelines for Electrical Practices:


Safety handbook for the building and construction industry:


Hierarchy of hazard controls: