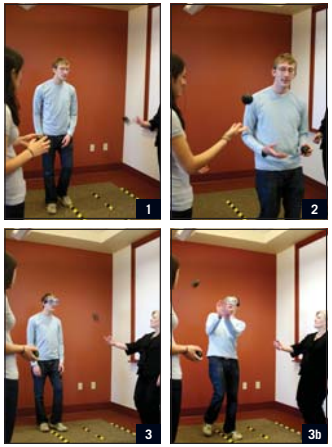
C

Extra TVL™ Activities

Perform all activities two to three times: without Fatal Vision® Goggles, without TVL™, and with TVL™.

5 Playing Catch



1. Layout a "walk-the-line" demonstration.
2. Position 2–3 people with soft balls at 2–3 points on the layout. These people should be about 4'–5' from the line.
3. Instruct them to take turns throwing their ball to the participant. Instruct the participant to:
   a. Stand at the beginning of the line.
   b. Keep looking straight ahead to the end of the line.
   c. Walk straight to the end of the line.
   d. Catch the balls.
4. Repeat steps 1–3, this time with the participant wearing a pair of Fatal Vision® Goggles with TVL.™

Discussion

- How did you feel the first time you saw a ball coming at you?
- Ask the spectators to describe what they saw. How would this translate into driving a car?
- Did the participant recognize the balls in time to catch the ball? Did it impact their ability to keep walking?

6 Driving SIDNE®

1. Layout a SIDNE® demonstration course.
2. Instruct the Transmitter Monitor to ONLY operate SIDNE® in NORMAL (unimpaired) mode for this exercise.
3. Position 2–3 people with beach balls at 2-3 points in the course. Instruct them to take turns rolling their ball toward SIDNE.®
4. Inform both the passenger and the driver that every beach ball is a traffic hazard, a child, an animal, another vehicle, or bicycle rider.
5. Place goggles on the passenger (not the driver).
6. Instruct the driver to:
   - Follow the arrows around the course.
   - Take evasive action only when the passenger informs them of a hazard.
   - Be aware of obstacles in their path.
   - Avoid hazards.
7. Instruct the passenger to:
   - Look straight ahead at all times.
   - Inform the driver as soon as they see a hazard.

Discussion

- What was the time difference between when the driver saw the ball coming toward SIDNE® and when the passenger saw it?
- Was the driver able to react as quickly as you thought necessary?
- Ask the spectators to describe what they saw and how the danger translates to them if they were the hazard or the passenger.

TVL™ patent pending.

Innocorp, ltd. To order refills of the TVL™, contact Innocorp, Ltd. at 1-800-272-5023 or www.fatalvision.com

A

QuickStart Guide

Start Here

Contents

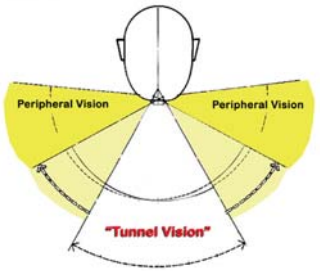
Objectives By the end of this session, participants will have experienced the effect of tunnel vision and will be able to describe impairment's impact on peripheral vision also known as tunnel vision and its potential consequences.

Preparation

1. Select the appropriate TVL™ for the Fatal Vision® Goggle.
2. Apply TVL™ to the Fatal Vision® Goggle.
3. Store TVL™ lens on the appropriate sheet or leave them on the goggle.

Safety First! Use spotters for participants wearing Fatal Vision® and TVL™. Keep demonstration area clear of all obstacles.

Introduction



Alcohol impacts a person's abilities in many ways. People who have consumed relatively moderate amounts of alcohol experience reduced peripheral vision, and are less likely to perceive or recognize objects and signals outside the central visual field. Their abilities in terms of judgment and concentration begin to decrease. It's been described as "cognitive nearsightedness." The individual begins to focus solely on obvious cues and signals in front of them while missing important cues from their surroundings. This change in focus and judgment can be described as tunnel vision or myopia. Myopia is when the eyes' focus is on images directly in front while the images to the side and farther away are blurred. A person that is experiencing tunnel vision or myopia may intently focus on an object directly in front of them but are not aware of what is happening outside of their central vision field. A car, a person, or an animal will not catch their attention until it/they have moved from their peripheral vision into the line of their central vision when it may be too late to react safely.

B

TVL™ Activities

Fatal Vision® and TVL™ are most effective when participants experience the goggles versus being a passive observer.

1 Demonstrate Peripheral Vision without Impairment

1. Have the individual close their right eye.
   - Have them extend their arms out to their side.
   - Slowly swing their arms forward and have them tell you:
     - Which hand they see first?
     - Do they see their right hand 90° from their nose?
     - Do they see their left hand 30° from their nose?
2. Repeat this activity for their left eye.
3. Ask them to remember where their right and left hands were at full peripheral vision.

2 Demonstrate Tunnel Vision

1. Ask participants to scan their surroundings for all objects that are blue.*
2. Have everyone in the presentation close their eyes.
3. Ask them to list everything that is yellow.*
4. How successful are they in listing the yellow objects?
5. Ask them why they performed so poorly?
6. Point out that they significantly narrowed their focus based on your instructions.
7. How would such a narrow focus impact their ability to drive safely?

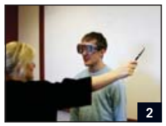
**Change the subject of what's being identified with each session. It can be colors or select other objects based on your surroundings.*

Discussion

Based on the above demonstration what impact does peripheral vision have on:

- Driving skills?
- The ability to walk?
- On athletic performance?

3 Using TVL™ with Fatal Vision® Goggles



1. Give the participant the following instructions:
   a. Tell them that you will be sweeping your finger across their line of vision and that they must look straight ahead not moving their head or eyes.
   b. Ask them to raise their hand when they can see your finger.
2. Have student don a pair of the Fatal Vision® Goggles with TVL™.
3. Repeat step 1, both a and b.

Discussion

- Point out how their field of vision has narrowed.
- What would happen if they were driving with a limited field of view?
- What impacts on their ability to drive safely might this have?

4 Changing Lanes

1. Layout two lanes of Walk-the-Line tape, each about 10' long.
2. Position one participant at the top of the right hand lane this is Driver 1.
3. Position the participant without TVL™ at the bottom of the left hand lane this is Driver 2.
4. Instruct Driver 1 to call out when they see Driver 2.
5. Have Driver 2 begin walking up their lane.
6. Mark the spot where Driver 2 was sighted.
7. Driver 2 returns to the bottom of their lane.
8. Have Driver 1 don the Fatal Vision® Goggles with TVL.™
9. Have Driver 2 begin walking up their lane.
10. Mark the spot where Driver 2 was sighted this time.

Discussion

- Would Driver 1 have safely changed lanes with TVL™?
- Why didn't their head check work?
- What else would be missed?

Supporting Facts

1. Blood alcohol concentration (B.A.C.) is stated as grams of alcohol per 100 milliliters of blood.
2. Persons under the influence of a low dose of alcohol while driving a car experience a reduction in their peripheral vision field.
3. Peripheral vision is impacted when B.A.C. reaches .05 and higher. At this point vision starts to blur and an individuals' reasoning, judgment, and concentration abilities begin to decrease.
4. Beginning at a B.A.C. of .05 research has shown that an individuals' eyes begin to quiver. A person who has been properly trained to administer a Horizontal Gaze Nystagmus (HGN) test can accurately assess a person's B.A.C. based on when their eye muscles can no longer smoothly pursue an object moving across their field of vision. When an officer sweeps their finger 12"–15" from the eyes of a person across their field of vision, the eye begins to quiver at the angles described below and corresponds to their B.A.C. level.

B.A.C.	Peripheral Vision
0.05	45°
0.10	40°
0.15	35°
0.20	30°