

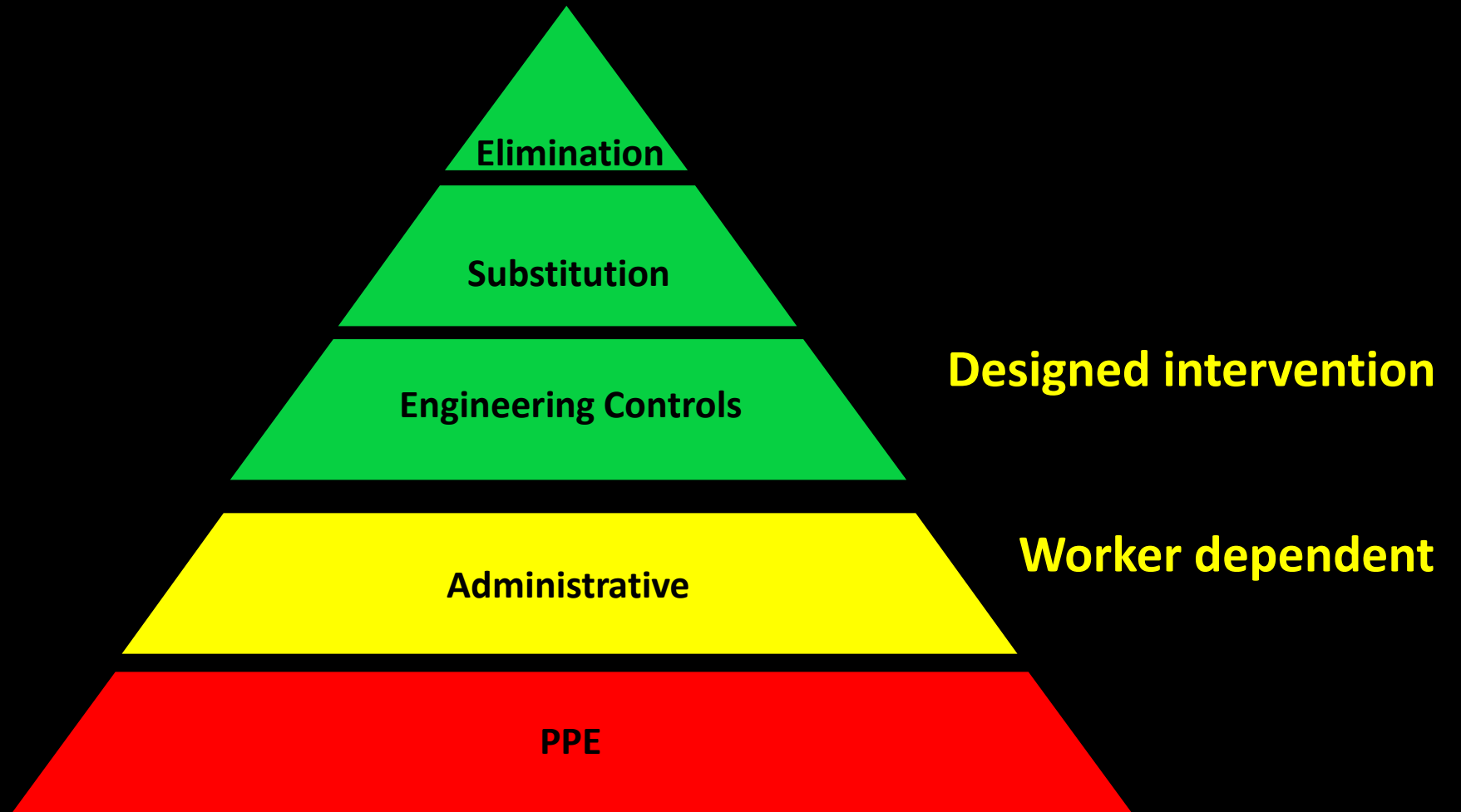


**Everybody's Different
But We all Bleed Red
It's in Our Culture**

Construction - Virginia Tech
Safety, Health and W

Hierarchy of Controls – A measure of safety culture

Fundamental Hierarchy of Culture in Design for Safety



Safety Climate and Safety Practices

- Different cultures, have
- Different languages, and have
- Different levels of literacy, with
- Different attitudes, that lead to
- Different risk assumptions, and
- We may not all speak the same language or read but we all bleed red and we all can die.



Focus

1. Report of research studies among Latino's working within the residential construction sector.
2. Studies
3. Insights
4. Lessons
5. Considerations

Three studies on vulnerable workers...

- **Vulnerable workers** are the young and old, are women and minorities, include migrant, immigrant workers, etc.
- **Key Points** are that vulnerable workers a) lack an advocate, b) lacks power to alter the conditions, and 3) often experiences repercussions in the form of retaliatory supervision or other punitive consequences.
- Three studies (all within residential sector involving Latino roofers, framers, and general mixed trade construction labor):
 1. Small family owned businesses employing family members
 2. Using Interactive Voice Recognition software to assess work safety climate, practiced behaviors, and task productivity.
 3. Using lay-trainers for delivering safety training materials



Insights on family owned small businesses... Generalized

- Younger family members, working within a family construction business, do not receive adequate safety training.
- Family members who supervise other family members believe that the other family members already have adequate construction safety knowledge due to having the family connection, (If it were only so easy.)

Vulnerable workers largely under report injuries.

- Vulnerable workers are likely to not report work place injuries by factor of up to 10 times greater than their reported figures(55/100 FTE vs 4.2/100 FTE). Even major injuries are 3.4 times greater than reported injuries.
- Work organization is the contributing factor.
 - The way things get (or don't get) done; how the work is designed (or not) and processed and managed; how training is carried out, poor supervisor commitment and management, precarious employment, and retaliatory supervision.



Supervisor Commitment – From question: Supervisors...

- ...do as much as possible to make my job safe,
- ...could do more to make my job safe, and
- ...are only interested in doing the job fast and cheap.



Safety climate predicts behavior practices, and this impacts a worker's level of risk taking

- Worker perceptions of company commitment to safety (the climate) is generally good.
 - The behavioral practices, matching these responses, are not so positive.
- The 'boss' is perceived as caring about worker safety,
 - Yet 'bosses' do not praise when observing safe work practices.
 - Initial safety training is not done at the time of hire.
 - Workers do not attend regular safety meetings,
 - If a 'safety' trainer hasn't worked the specific trade they don't understand the risks of the work.
- Fatalistic belief: >80% of the workers expect to be injured on the job within the next year.

Reflections on the safety culture of the studied Latino construction worker

1. 82% believe they are going to be injured within the next year. This affects safety behavior.
2. Trainers lack credibility among the workers if the trainer hasn't worked the specific trade (notably in roofing and framing).
3. 40% of workers do not believe that the site superintendent is doing everything possible to make their work safer.

Get Smart Working in Roofing!



Juan ha estado trabajando por muchos años en roofing y ha visto varios accidentes. Él también tuvo un accidente muy serio cuando se cayó de un techo. Él aprendió una lección de esa mala experiencia.



¡Peligro y promesa!
¿Qué cosas cree usted que Juan está haciendo?

A pesar de que Juan, Manuel y Felipe son de la misma familia, ellos no tienen las mismas ideas sobre la importancia de trabajar de manera segura. Juan sabe que trabajar con cuidado puede prevenir accidentes, pero Manuel y Felipe piensan que los accidentes pasan por muy suerte. Ellos siempre se burlan y se ríen de Juan y dicen: "¡Jajajaja! ¡Por nada lo crees que si hace años de estar en el trabajo!"

Próximo Next



Juan ha seen several accidents in his years as a roofer. He also had a serious injury when he fell from a roof. He learned a lesson from that experience.

STOP and ask!
What do you think about what Juan is doing?

Although Juan, Manuel and Felipe are related, they don't have the same ideas about the importance of working safe. Juan knows that working safely could prevent accidents, but Manuel and Felipe think trying to prevent accidents is a waste of time. Manuel and Felipe always make fun of Juan, they say "Jajajaja!" and laugh at him because all of the things he does before he ever starts working.

Próximo Next



Juan y Felipe siempre visitan a Manuel y le hacen comidas o papales para su bebé. En la última visita, Manuel estaba enojado.



¡Punto Listo!

Después que Manuel explica sus problemas.
[Felipe] "¡Mala suerte, pero ¡tú sabes que los accidentes pasan!"

Juan and Felipe often visit Manuel and take him food or diapers for his baby. In their recent visit, Manuel was upset.

After Manuel explained his woes...

[Felipe] "Tough luck, but you know that accidents happen."

GET SMART!

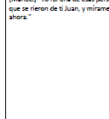


[Juan] "¿Qué podemos hacer para prevenir accidentes en el roofing? ¿a qué debemos prestar atención a cuatro cosas?"

[Manuel] "¡No, use el equipo de protección personal! No significa que yo sea una persona, significa que yo soy listo. ¿Si usted se cae en el trabajo y no puede trabajar, quién va a pagar su renta y comprar la comida para su familia?"

[Felipe] "¿Tú sabes Juan, yo sé que todo el mundo se burla de ti y de tu familia de protección personal. 'La seguridad' son las cosas que se ponen esas cosas, y yo no soy una persona, yo soy un hombre. Además, tenemos tiempo para cuidarse significa mucho menos tiempo para trabajar, necesitamos hacer el trabajo lo más pronto posible para podamos a hacer otro trabajo!"

Próximo Next



SEE SAFETY

CLIMB SAFETY

FALL SAFETY

WEAR SAFETY

SEE SAFETY

WEAR JOB SITE

CHECK EQUIPMENT

[Juan] "Come on Juan, you know that everyone makes fun of you and your wife. The 'safety' are the ones who wear all those things, and I'm not a person, I am a man. Besides that, taking time for safety means less time for work, we need to get the job done as quickly as possible so that we can move on."

[Felipe] "Hoi! Wearing PPE doesn't mean that you're a person, it means I'm smart! Who is going to pay your rent or buy your family food if you are injured on the job and can't work? None! Not the boss, not the other guys, no one! The best way to protect your family is for you to work safe. Some guys may laugh at you, but you shouldn't care because what they are saying isn't real. 'That's like Quid pro!'"

[Manuel] "I know that I was one of those guys who laughed at you, Juan, and look at me now."



GET SMART!



SEE SAFETY

CLIMB SAFETY



FALL SAFETY

WEAR SAFETY

FALL SAFETY



USE WALKBOARDS

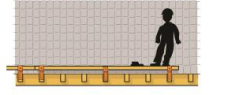
DON'T OVERLAP!

USE BARRICADES

LATCH ON

WEAR CORRECT FOOTWEAR

A FEW WEEKS LATER



Layperson Crafts Training Manual Concept

Get Smart Working in Roofing!

Considerations...

1. Find mechanisms for unbiased communication particularly with a vulnerable workforce.
 - Enforcement means you care
2. Train the trainers from crew members. Use alternative means to compensate for literacy challenges.
 - Picture books
3. Move from behavior-based safety toward people-based safety philosophy. (Its about the family)
4. Move toward the elimination of hazards, using a measured HOC.

