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NSSGA Health & Safety: ***Communication, Resources, and Training***

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Hi, I'm Libby

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NSSGA is the leading voice and advocate for the aggregates industry. We advance public policies that protect and expand the safe and environmentally-responsible use of aggregates that build America's infrastructure and economy.

Where Are We Going?

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I. Communication & Working
with **MSHA**



II. Providing Industry **Resources**



III. **Education** and Training

I. Communication with MSHA

- Day-to-day communications with HQ
- Support for initiatives
 - Consistency coast-to-coast
 - Powered haulage initiatives
- Comments (etc.)
 - Powered haulage
 - Silica
 - Emergency Temporary Standard (ETS)
 - New Secretary & confirmation
- NSSGA-MSHA Alliance
 - Regular meetings
 - Safety communications





Prevent Powered Haulage Injuries and Fatalities



DURING THE FIRST HALF of 2021, nine miners were killed and 185 were injured in accidents involving powered haulage equipment such as shuttle cars, scoops, locomotives, front end loaders and more. Year to date, this is the highest number of powered haulage fatalities since 2006, despite being only partway through the calendar year. Although the number of powered haulage accidents in the industry has been consistently trending down for many years, this recent spike in powered haulage fatalities and injuries is a stark reminder to stay vigilant and that complacency about any area of safety is misplaced.

Every mining operation is unique in its size, number of employees, mining techniques, types of mobile equipment, etc. But, when it comes to powered haulage, there are mutual safety aspects that should be taken into consideration industry-wide, which include visibility, communication, traffic management, seatbelt use and dumping practices.

We strongly recommend operators consider these best powered haulage practices to reduce serious injuries and fatalities within the aggregates industry:

Visibility

- **Always be mindful of blind areas.** Do not assume large equipment operators can see you or your vehicle — stay in the line of sight. Do not pull into or park in the blind area of a haul truck.
- **Improve visibility** by adding strobe lights or high-visibility flags attached to a long flexible rod or a whip antenna on smaller vehicles (pickups, small support equipment, etc.)
- **Consider installing cameras, collision warning systems or collision avoidance systems.**

Communication

- **Establish and follow communication protocols** that require verbal verification for all equipment operators.
- **Make eye contact or radio contact** with the operator before approaching large equipment.
- **Sound your horn** to warn miners that you are about to move and wait to give them time to get to a safe location.
- **Wear high visibility clothing** when working around powered haulage equipment.

Traffic Management

- **Place traffic signs so they are clearly visible to operators** and take into account the time it takes to see, read and react to a sign. Also consider braking and stopping distances for the equipment used at the mine.
- **Ensure signs are in a language understood by miners** and equipment operators.

Seatbelt Use

- **Establish and follow policies that require seatbelts be worn at all times.**
- **Inspect seatbelts** and mounting hardware before operating the equipment and replace damaged or worn parts. ■



Evitemos lesiones y muertes por equipos de acarreo propulsados

DURANTE EL PRIMER SEMESTRE de 2021, nueve mineros murieron y 185 fueron heridos en accidentes que involucraron equipos de acarreo propulsados, tales como vagonetes lanzaderas, cucharones, locomotoras, cargadores frontales y más. En lo que va del año, este es el mayor número de muertes por equipos de acarreo propulsados desde 2006, a pesar de que sólo ha transcurrido una parte del año calendario. Aunque el número de estos accidentes en la industria ha mostrado una continua tendencia decreciente durante varios años, este incremento reciente en muertes y lesiones es un crudo recordatorio de mantenernos vigilantes y que el exceso de confianza en áreas de seguridad está fuera de lugar.

Toda operación minera es única en cuanto a tamaño, número de trabajadores, técnicas de extracción, tipos de equipos móviles, etc. Pero cuando se trata de equipos de acarreo propulsados, existen aspectos de seguridad mutua que deben ser tomados en cuenta a nivel de toda la industria, incluyendo visibilidad, comunicación, manejo del tráfico, uso de cinturones de seguridad y prácticas de vertido.

Recomendamos encarecidamente que los operadores consideren las siguientes mejores prácticas de acarreo propulsado para reducir las lesiones severas y las fatalidades en la industria de los agregados:

Visibilidad

- **Siempre esté atento a las áreas ciegas.** No suponga que los operadores de equipos grandes pueden verlo a usted o a su vehículo — manténgase en la línea de vista. No se acomode o estacione en el área ciega de un camión de acarreo.
- **Mejore la visibilidad** agregando luces estroboscópicas o colocando banderillas muy visibles en una barra larga y flexible o en una antena de látigo en vehículos más pequeños (camionetas, equipo de apoyo pequeño, etc.)
- **Considere instalar cámaras, sistemas de alerta de colisiones o sistemas anticollision.**



Comunicación

- **Establezca y cumpla con los protocolos de comunicación** que requieran la verificación verbal para todos los operadores de equipos.
- **Haga contacto visual o por radio** con el operador antes de acercarse a equipos grandes.
- **Suene su bocina** para alertar a los mineros que usted está a punto de moverse y desles tiempo para llegar a su sitio seguro.
- **Utilice vestimenta de gran visibilidad** cuando trabaje cerca de equipos de acarreo propulsados.

Manejo de tráfico

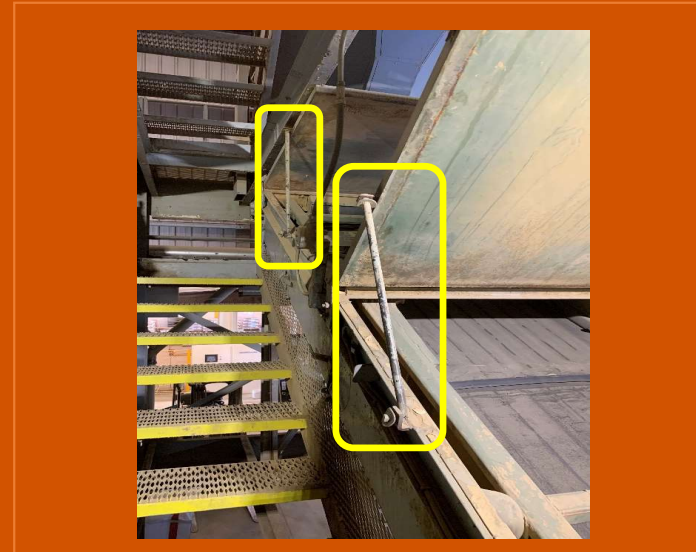
- **Coloque señales de tráfico de manera que sean bien visibles para los operadores** y tome en cuenta el tiempo que se tarda en ver, leer y reaccionar a una señal. También considere las distancias de frenado y parada para el equipo que se utiliza en la mina.
- **Asegúrese que las señales estén en un idioma que comprendan los mineros** y operadores de equipos.

Uso del cinturón de seguridad

- **Establezca y cumpla con políticas que exijan el uso de cinturones de seguridad en todo momento.**
- **Inspeccione los cinturones** y sus piezas de montaje antes de operar el equipo y reemplace piezas dañadas o desgastadas. ■

Communication with Members

- Regular communications (emails, bi-annual meetings, etc.)
- Monthly Safety Meetings
 - Producers-only (every other month)
 - Near misses
 - Safety improvements & innovations



II. NSSGA Resources



PODCAST

NSSGA Podcast

NSSGA

FOLLOW



All Episodes



Rob Lanham Returns With Another Safety Story

Rob Lanham, the Aggregates Program Manager at the Virginia Transportation Construction Alliance, previously joined the show to discuss his recent heart attack. Today he returns to share...



Nov 4 · 5 min 13 sec



The Dangers of Taking Shortcuts With Troy Austin

Troy Austin is the Value Safety Manager at Luck Companies, as well as a Marine Corps Veteran. Today he tells the story of a friend who was accidentally killed by committing an unsafe act duri...



Oct 7 · 4 min 5 sec

About

Insights for the aggregates industry from the National Stone, Sand and Gravel Association.

Business



NSSGA Resources

- Safety Month (June)
 - Speaker
 - Brandon Schroeder
“Believe in Safety”
 - Poster
 - Social media
 - Podcast launch

ALL IN *for* SAFETY!



Safety is an attitude.
What's yours?

*See something,
say something.*

*Always report unsafe conditions
as soon as possible.*

**ALWAYS MAINTAIN
3 POINTS OF CONTACT**
*(two hands and a foot, or two feet and a hand)
when ascending or descending equipment,
ladders or rolling stock steps.*

**SAFETY STARTS
WITH TRAINING.**

**Always use the right tool for the job.
Never take shortcuts.**

DON'T RUSH.

*Take time to consider the safest way
to do a task before you begin.*

**Good housekeeping
IS ESSENTIAL.**

*The little things make a big difference
in preventing slips, trips and falls.*



NSSGA Resources

- Partnerships with NIOSH
 - Miner Total Health Program
 - Mine Safety and Health Research Advisory Counsel
 - Respirable Mine Dust Partnership (NIOSH & MSHA)

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NSSGA Resources

- Task Forces
 - Website TF
 - Safety Initiatives TF
 - Serious Injuries and Fatalities TF
- New Ideas for Toolbox Talks
- Online interactive version with more detail

Keeping *Toolbox Talks* **FRESH**

Whatever you call them — *Toolbox Talks, Tailgate Talks, Safety Huddles* — discussions at the beginning of a shift that bring awareness to safety and health topics are routine throughout the aggregates industry. But materials can get stale, repetitive or boring — all of which mean the important messages being delivered may not be reaching those who need to hear it most: the workers. The NSSGA Health & Safety Subcommittee offers these innovative practices to help keep your *Toolbox Talks* fresh, engaging and effective.

Make them Interactive

- Integrate a Stretch and Flex Program
- Do a “Bug Hunt” to Identify Hazards
- Start All Meetings with a Safety Share
- Use Guidance Questions during Safety Discussions
- Choose Two and Do
- Do the Monday Morning Mop-Up

Use Different Presentation Approaches

- Switch Up the Location
- Ask Different People to Present
- Share New Materials — Or Old Materials in a New Way
- Engage Leadership

Make Content Relatable

- Relate Alerts to your Facility
- Use the Safety Chain of Events
- Learn from Near Hits/Misses
- Share Safety Stories

Consider Other Industries and Embrace Sharing

- Use Vendors
- Try a Company or Facility Safety Swap
- Use MSHA as a Resource

Utilize Technology

- Record and Share an Engaging Speaker
- Create Re-enactment Videos
- Utilize Safety Related Apps or Programs



You'll find more in-depth guidance on effectively implementing these strategies at nssga.org/toolbox_talks

■ MAKE THEM INTERACTIVE

INTEGRATE A STRETCH AND FLEX PROGRAM

+

DO A "BUG HUNT" TO IDENTIFY HAZARDS

+

START ALL MEETINGS WITH A SAFETY SHARE

+

USE GUIDANCE QUESTIONS DURING SAFETY DISCUSSIONS

+

CHOOSE TWO AND DO

+

DO THE MONDAY MORNING MOP-UP

-

Start the week fresh, clean, and engaged by having workers start each week with a jobsite walk to identify and address housekeeping concerns. This not only carves out a dedicated time weekly for housekeeping, but also gets everybody moving and tunes their minds back into work after the weekend.



Addressing **DISTRACTIONS** on Mine Sites

Distractions on mine sites can be deadly. The scale and power of equipment used, coupled with ever-changing site conditions, requires complete and undivided attention be given to the task being performed. The aggregates industry goes to great efforts to train miners about the hazards associated with mining – but even years of excellent training can be undone with just seconds of distraction. Distractions can, and do, result in catastrophes that cause major damage, severe injuries, and death.

PLAN

Think ahead. Involve the whole workforce. Be proactive.

- Management has the responsibility for establishing the message that reducing workplace distraction is a priority, particularly when considering work planning and scheduling.
- Set policies and establish messages that clearly communicate the risks of workplace distraction and how best to avoid distractions in the workplace.
- Consider establishing a multi-discipline team that represents both management and work crews to participate on planning activities.
- If data is available, look for trends in incident occurrences that indicate workplace distraction as a contributing factor.
- Review any current safety practices or policies related to distraction to evaluate if they meet the needs of the workplace and identify areas that can be improved upon.

dis•trac•tion (n)

1. A thing that prevents someone from giving full attention to something else.

Everyone — including safety professionals, managers and miners — must be aware of the role distractions play in accidents. Here are proactive ways you can address one of the greatest causes of accidents and injuries:

continued on reverse

IDENTIFY DISTRACTIONS AS HAZARDS

Increase awareness. Be mindful about distractions. Speak up.

- Specify policies against multi-tasking (e.g., driving and texting, conducting tasks while using cell phones, etc.).

- Identify common or potential distractions as part of a job hazard assessment before beginning work.
- Encourage a culture where all employees can check in with one another about distractions or mental fatigue without accusation.

TRAIN

Take all opportunities to train. Revisit often. Be innovative.

- Training should emphasize that workers should not interrupt or distract another worker while he/she is conducting a task. Don't be a distraction to your co-worker.
- Develop a resource library for distraction training. Find materials from YouTube,

MSHA, OSHA, National Safety Council, NSSGA, colleagues, and more.

- Use nudges or other reminders to keep employees mindful of the task at hand. It is easy for a mind to wander when performing a routine or repetitive task, and reminders can help bring attention back to where it is most needed.

ESTABLISH POLICIES AND PROCEDURES

Formalize commitment. Use administrative controls. Write it down.

- Ensure existing policies and procedures emphasize the importance of maintaining focus on the task at hand.
- Establish policies addressing key causes of distractions: cell phones, texting, fatigue, etc.

- Include an assessment of distractions or lack of focus as a potential cause in incident investigation procedures. Share findings (without blame or targeting individuals) to increase awareness about the role distractions play in accidents.
- Add the hazard of distraction to job hazard assessment forms or programs.
- Consider requiring use of "do not disturb" warning signs and barriers or barricades for specific tasks (e.g., welding) to reduce distraction hazards.

CHECK AND REVIEW

Use data. Continuously improve. Share findings.

- Review previous accident investigations and reviews to identify and highlight where distractions could have been or were a contributing factor.

- Ensure that safety conversations do not become a distraction – including those conversations that are part of a behavior-based safety program.
- Review overall programs and ensure that distractions are considered as part of accident investigations, day-to-day operations, and more.

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Find additional resources on NSSGA's Health & Safety webpage at:
nssga.org/distractions

PLANNING



HAZARD IDENTIFICATION



TRAINING



Training is an essential component of all safety programs. The importance of maintaining focus and proactively avoiding distractions should be integrated into all aspects on an operator's training program including New Miner Training, Task Training, Part 46, Toolbox Talks, and any other time training is conducted.

- Training should emphasize that workers should not interrupt or distract another worker while he/she is conducting a task. Don't be a distraction to your co-worker.
- Develop a resource library for distraction training. Find materials from YouTube, MSHA, OSHA, National Safety Council, NSSGA, colleagues, and more.
- Use nudges or other reminders to keep employees mindful of the task at hand. It is easy for a mind to wander when performing a routine or repetitive task, and reminders can help bring attention back to where it is most needed.

POLICIES AND PROCEDURES



CHECKING AND REVIEW



Serious Injuries and Fatalities TF

- SIF = “injuries that are life altering, life threatening, or cause a fatality”
- “Evidence shows that not all events have the potential to lead to an SIF and **the absence of reportable injuries is not predictive of the absence of future SIF events**. The strategy for reducing SIFs involves the **identification of fatal risks**, identification of **critical controls**, monitoring of those controls, and the review of SIF events for organizational learning.”

Serious Injuries and Fatalities TF

- Small team of 5
- Identification of:
 - (1) High SIF-potential tasks
 - (2) Critical controls
- Creation of manual
- Training with examples



The background of the slide is a photograph of an industrial facility, likely a coal processing plant. A long conveyor belt system is visible, extending from the upper left towards the center. The air is filled with a thick, orange-brown dust or coal powder, which is being kicked up by the machinery. The overall color palette is monochromatic, dominated by shades of brown and orange. In the top left corner, there is a small, solid orange horizontal bar.

III. Noise & Dust Workshop(s)

- 3 days class/hands-on training
- April 2022
- Columbus, OH
- In coordination with MSHA trainers
- Maximum participants 15
- Planning future locations

Communication & Conflict Management

- “If you only take 3 things away” version...
 - Interests vs. positions
 - Go awkward early
 - Remember *your* interests

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Why Work on Conflict Resolution?

- ~~Not~~ rarely taught in school
- Leadership
- Let's Talk About *Stress*

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Stress is from Head to Toe

- Nervous system
 - Body's communication channels
 - "Fight or Flight"
- Heart Disease
 - 32% of global deaths*
- Risk Factors
 - Smoking
 - Hypertension
 - Exercise
 - Diets
 - Stress



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*World Health Organization (2019) <https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases>

The Good News

- We are in the driver's seat
- *Modifiable* Risk Factors
 - Smoking
 - Hypertension
 - Exercise
 - Diets
 - Stress
- Stress management is *learned* behavior; we can practice and improve.
- Workout your conflict management muscles

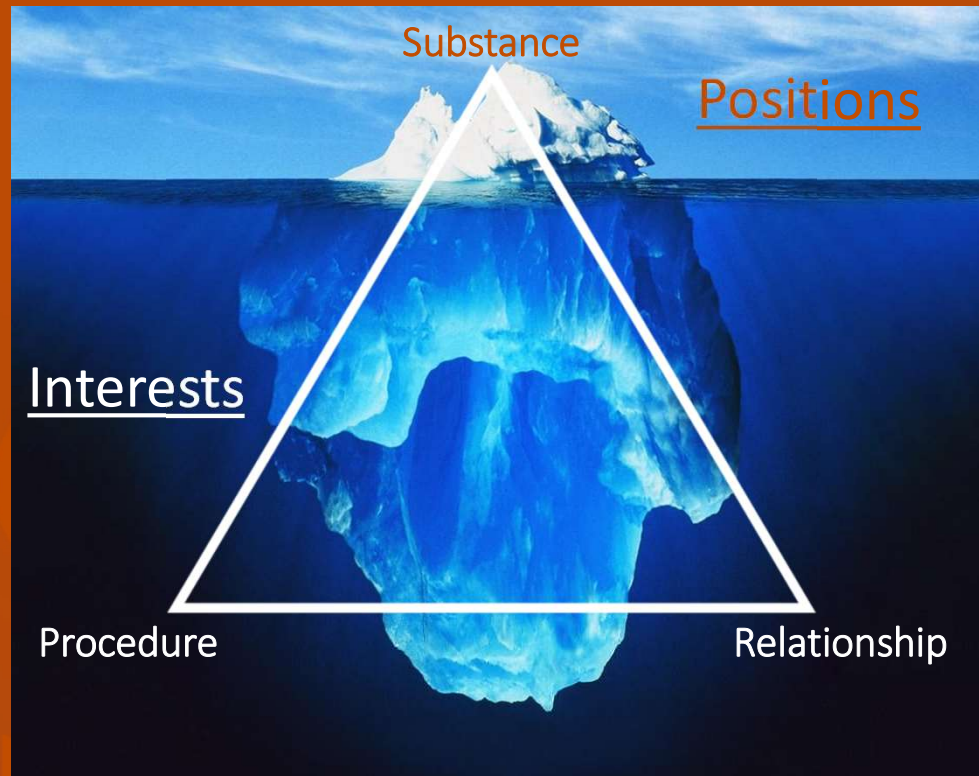
“Life is 10% what happens to you and 90% how you respond to it”

(1) Positions vs. Interests



N

Positions vs. Interests



N

Positions vs. Interests

Positions

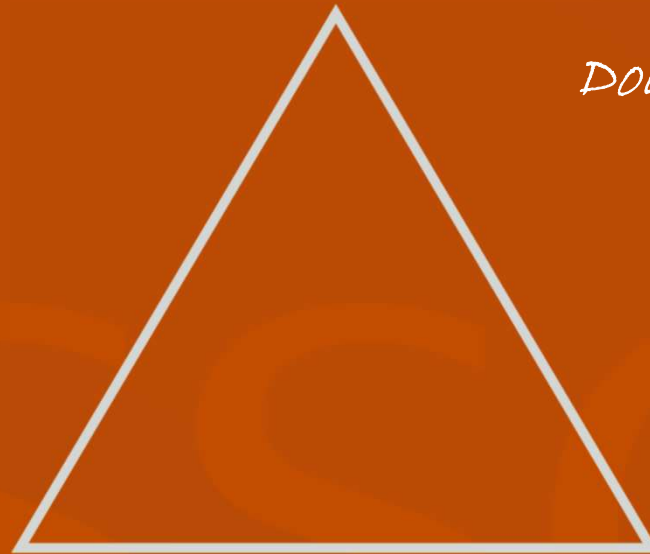
- Dishes – “You do the dishes for once”
- Work Project – “I don’t want to do that project; that’s not my job.”

Interests

- Dishes – “I feel unappreciated when I cook and you don’t help clean”
- Work Project – “The workload is imbalanced and is unfair.”

Positions vs. Interests

*When I cook, you clean
Every other day*



Doing the dishes

*Respect
Fairness*

It's Not About the Nail

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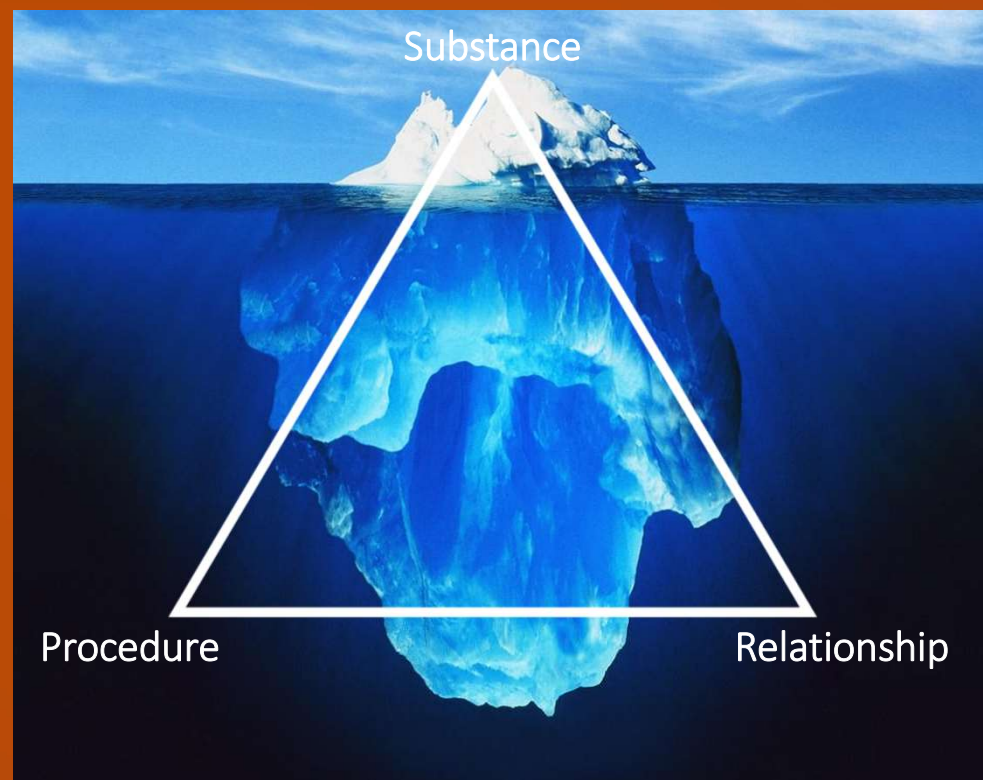


Positions vs. Interests

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*It's not about the nail,
it's about finding
common ground.*



(2) Go Awkward Early



- Prevent Misunderstanding and Assumptions
- Get to the Root Faster
- Find common *interests*

Go Awkward Early

- Open-ended Questions
 - "Are you excited for the dentist?"*
 - Or,
 - "**How** are you feeling about going to the dentist?"*
- Clarifying Questions
 - "**Can you explain more?**"*
 - "When you say they're impossible, **what do you mean?**"*
- "I" Statements
 - "I feel overwhelmed..."*
 - Or,
 - "You're too demanding..."*



(3) Remember your interests

- It's about people
- Understand and care about those around you
- It makes us safer
 - Connection
 - Understanding
 - Knowing when someone is "off"
 - Checking in
 - Calling out
- It's simple
 - Ask
 - Share



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Thank You! Questions?

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