A rig move is a complex task (Photo 7, right) involving many people, primarily roughnecks who do the assembly/disassembly, and a trucking crew (Photo 8, below) to move parts from site to site.

tors were instrumental in helping the team to film various operations and capture 32 interviews.

Willie Stephenson (Photo 6, p. 45), a tool pusher on a McVay rig, agreed to be the primary narrator and he was interviewed on camera for several hours. Other narrators were used to add depth and breadth to the story. Devon, McVay, Bandura, Patterson-UTI, Sterling and EnCana were true partners in this project, and it could not have been completed without their guidance, suggestions, assistance and support.

The original plan was to develop a single video, but because a rig move is a complex task involving many people (Photos 7 and 8), the team realized it would be difficult to make a single all-encompassing safety awareness video. After watching several rig moves, it was noted that two primary groups are involved: 1) the roughnecks, who assemble and disassemble the rigs; and 2) the truckers, who load and transport all the pieces to the new site. Because these tasks were fundamentally different and equally dangerous, it seemed logical to make two videos, one for roughnecks and one for truckers.

At the time of this writing, the first video, *Move It! Rig Move Safety for Roughnecks,* had been completed and released at a large safety conference in late 2010 (Photo 9). The second video, *Move It! Rig Move Safety for Truckers,* is scheduled for production in the first half of 2011. Both videos will follow the process and schedule developed by the author while working in the mining sector. This process/schedule includes the following steps:

- Gather as much footage as possible on location.
- Interview insiders on what is going on and what is important to the process.
- Log all B-roll footage gathered.
- Transcribe all interviews.
- Create a story line from the master interviews.
- Select shots from the B-roll to illustrate the points included in the narratives.
- Edit it all together into two separate videos.
- Send drafts out for review by safety and operations experts in the O&G sector.
- Revise the drafts to reflect the experts' comments and suggestions.
- Gain final approval for the videos from NIOSH.
- Release the videos.
- Market and distribute free of charge to industry stakeholders.

Avoid Common Mistakes

To develop training that high-risk workers will accept and find memorable, it is best to keep a few basic guidelines in mind. First, workers know much more about the work than an outsider ever will, so be sure to include them in the process.

Based on the author's experiences in the mining and commercial fishing industries, workers eagerly share what they have learned if given a chance. Their own safety is at stake if someone is working unsafely, and they understand that they have a vested interest in making sure everyone knows how to do things correctly. Ignoring them or underestimating their interest in safety is a mistake.

Many training developers select the wrong spokesperson. The person providing the lessons must look, walk and talk like those who will be watching the safety video. Using a "talking head" who is disconnected from the industry or who does not perform this type of work is not a good idea.

Professional actors, while arguably more comfortable in front of a camera than workers might be, are not credible as occupational teachers. They do not understand industry jargon or the nuances of the work, which will be obvious to the trainees. Using a company executive as a spokesperson is also ineffective. A CEO talking about how to perform specific tasks while wearing a clean, pressed shirt and shiny hardhat will not be convincing to workers.

The best choice for the master trainer is someone who looks the part and speaks with occupational (not organizational) authority. The master trainer should use language understandable to trainees, who will understand quickly that he is a cultural insider who knows what he is talking about.

Even new hires are generally adept at identifying people who can keep them safe and teach them, and they will gravitate toward those people, regardless of who the company assigns as a mentor or trainer (Machles, Bonkemeyer & McMichael, 2009). Putting recognized, knowledgeable insiders in a training video, if they are willing, makes a lot of sense.

Once the decision is made to create a training video, consider the topic. It is much easier to proceed if the topic is narrowly focused. For example, "entering confined spaces" is probably a better choice than "oil and gas safety."

Duration is another consideration. Some trainers believe that no video should be more than 5 to

6 minutes long. NIOSH research has shown that this perceived limitation may be due to the fact that some videos simply do not hold people's attention. If the story is well-told and the storytellers are credible, training videos can be longer.

In fact, one NIOSH video about a disastrous fire in an underground silver mine that killed 91 people runs more than 60 minutes (Cullen, 2002). It is used in training sessions, and has also been used by other industries, such as firefighters, the military, occupational nursing and tunneling. The story is compelling because the 27 "stars" tell the story based on their own experiences during the fire; its length is not considered a negative.

Using industry experts, such as SH&E professionals and some workers, as technical reviewers is also recommended. They will identify elements that are not quite accurate or information that be left out or added. The video must be technically accurate.

Different companies have different policies that should be considered. For example, if one company requires worms to wear green hardhats, the video should not feature new hires wearing red hardhats. Such differences are opportunities to discuss with trainees geographic or organizational differences in how certain tasks are performed (e.g., state or provincial regulations, environmental issues, workforce issues, multiple factors). While impossible to show how everyone does things, strive to show best practices as defined by industry experts.

When NIOSH was developing safety videos for the mining industry, a premier was held so people in the video could attend. This was a way to thank them for participating and an opportunity to introduce the new video to the industry.

Because workers move around so often in many of these industries, the informal grapevine is active. Marketing and distribution efforts are often boosted when the "stars" tell colleagues and coworkers about the video and that it will be shown during a safety meeting. Miners looked forward to seeing the videos and actually started asking when the safety meetings might be held rather than trying to avoid them.

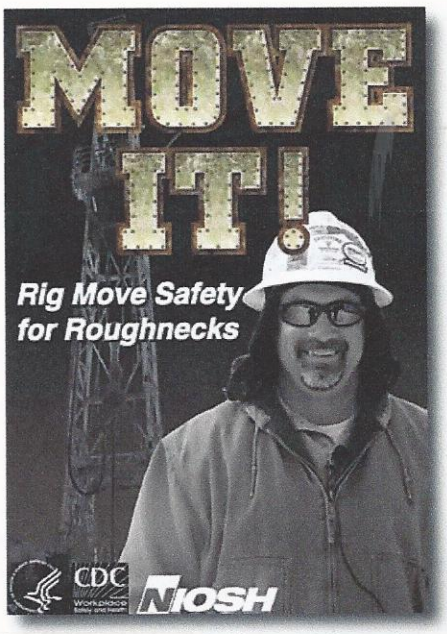
It is hoped similar informal marketing will occur in the O&G industry. If workers are eager to see new safety videos, they will pay attention to the messages included and remember them longer, which is a major goal of any training program.

Conclusion

Workers in high-risk industries face hazards that most people never experience. While these industries have higher injury rates than other industries, perhaps it is noteworthy that they perform their work with as few injuries as they do. This must be attributed to the efforts of safety directors and trainers, regulatory agencies, managers and operators, supervisors and the workers themselves.

Training for workers is both mandated and necessary, but training will not work if it is not acceptable to the workers. Trainers who utilize the power that occupational cultures have to control and change the actions and beliefs of their members will be more effective in reducing injury rates.

No one wants to get hurt on the job. Therefore, SH&E professionals need to provide the most effective training possible to help keep people safe. Occupational cultures, and the norms, beliefs and stories they include, are always present on worksites. They can be valuable keys to creating training that works, sending everyone home safely at the end of the shift. **PS**



Because the workers involved in rig moves perform fundamentally different and equally dangerous tasks, the research team decided to make two videos, one for roughnecks (Photo 9) and one for truckers.

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