

## Shots - NPR's Health Blog

# Rescued Miners Face Psychological And Other Health Hurdles

Categories: [International Health](#), [Mental Health](#)

01:35 pm

October 13, 2010

by ELIZA BARCLAY



Hugo Infante/Government of Chile/AP

Jorge Galleguillos, the 11th miner rescued from the San Jose mine, is carried away on a stretcher after being trapped underground with 32 other miners.

After enduring 69 days in a small, damp space 2,200 feet below the surface of the earth, the Chilean miners are reportedly in remarkably good shape.

Chilean Health Minister Jaime Manalich has been updating reporters

regularly on their status, and early this afternoon he noted that the miners who've made the journey to the surface so far are showing elevated heart rates, but otherwise are doing "quite well."

After a quick reunion with friends and families, the miners go by stretcher to a regional hospital for tests and visits with dermatologists and ophthalmologists. The miners are likely to have picked a number of minor conditions during the confinement, but the most serious may be the psychological effects of their ordeal.

Shots spoke to [Dr. Alan Langlieb](#), an expert in disaster psychiatry and public health affiliated with Johns Hopkins. He says it's hard to know how resilient – and capable of bouncing back from the trauma – the miners will be.

"But in general some proper counseling, maybe with the group, and the chance for them to vocalize what they experienced will all help with this bounce-back and resilience," says Langlieb. "Most people will do very well."

NASA [has been helping](#) Chilean officials, doctors, and psychologists in their preparation for the miners' return, using experience gleaned from astronauts and their and their families' struggles with confinement and isolation.

Dr. Albert Holland, a NASA psychologist who traveled to Chile last month, told *All Things Considered's* Melissa Block today that the miners may feel lasting repercussions. "I'm sure the physicians down there are looking for any signs of anxiety reactions or depression or even PTSD," Holland said.

In a Live Q&A this morning on the *Washington Post's* website, Dr. Michael Duncan, chief medical officer and leader of the NASA team that went to Chile, described the ways the miners may rely on each other as they recuperate.

"They will want to stay as close as they can and in fact, we are hearing that on the media reports from the mine site that the miners who have been rescued want to stay until all the miners are on the surface," Duncan noted. "So they still have that cohesive bond of this experience."

Other lingering health issues the miners may face include:

**Eyes:** After more than two months without natural light, their eyes may have lost the ability to adapt to it. Their corneas may be especially sensitive to ultra-violet light, which is why the miners are wearing [\\$260 sunglasses](#) donated by Oakley as they emerge from underground. Ophthalmologists treating the miners will likely expose them slowly to natural light over the next few days.

**Sleep:** The absence of natural light may have affected the miners' biological clocks and sleep cycles, according to biologist Samer Hattar at Johns Hopkins University. "The miners need to be sure to expose themselves to natural light at the correct time of day — daytime — to readjust their clocks and receive the necessary photons to enhance their moods," Hattar advises.

**Circulation:** Doctors sent special all-liquid food packed with minerals and protein to prevent nausea and stabilize blood pressure for their journey up. In the half-mile ascension, the miners will feel a significant change in pressure that could impact their circulatory systems. The Associated Press [reported](#) the miners took low doses of aspirin and are wearing compression socks to fight blood clots that could form.

**Lungs:** The miners have been breathing humid, stagnant air for two months. The air inside the mine is filled with mineral particles and could also contain mold. The exposure to could leave the miners with lasting respiratory trouble.

**Skin:** The humidity and the high underground temperature could cause skin conditions and infections.

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**Joann Flora (FloraBloom)** wrote:

The last trapped mine is on the surface! The rescue crew above are singing & clapping, the crew below are elated. Luis Urzua, #33, helped them keep it together throughout the ordeal. What an amazing event!

quarta-feira, 13 de outubro de 2010 20:55:55

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**Joann Flora (FloraBloom)** wrote:

Only one to go!

quarta-feira, 13 de outubro de 2010 20:31:15

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**Joann Flora (FloraBloom)** wrote:

#31 is in!

quarta-feira, 13 de outubro de 2010 20:07:14

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**kevin wood (kgw89)** wrote:

To Karen Chance: what?

quarta-feira, 13 de outubro de 2010 19:24:33

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**Joann Flora (FloraBloom)** wrote:

Four more stranded miners to go and then the rescue workers! Yes, DH, good news is truly GOOD to hear. We spend far too much time focusing on the bad news in the world. This event is a triumph of humanity, nations, and the will to survive. I applaud the Chilean government and mine company for never giving up on those men. Watching the joy they, their families, and co-workers express with each ascent is deeply moving. The next time I think I'm having a bad day, I'll remember those miners and the rescue effort.

quarta-feira, 13 de outubro de 2010 19:22:04

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**D H (dldl)** wrote:

Good news is nice to hear sometimes.

quarta-feira, 13 de outubro de 2010 18:15:16

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**Joann Flora (FloraBloom)** wrote:

The 26th man is out. He is Claudio Acuna who celebrated (?) his 56th birthday in the hole. The capsule is down and preparing to bring up the 27th miner, Franklin Lobos. Only more seven more to go! The five rescue workers will then ascend.

quarta-feira, 13 de outubro de 2010 18:08:20

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**Karen Chance (fightingchance)** wrote:

To Kevin Wood:

I'll take that as a "yes."

quarta-feira, 13 de outubro de 2010 17:51:25

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**Art Aficionado (Art\_Aficionado)** wrote:

Three cheers for the rescued miners... and three cheers for America for making this rescue possible. I'm glad they're home.

quarta-feira, 13 de outubro de 2010 17:24:12

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**MiMi Diva (MiMiDiVa)** wrote:

Rejoice! These men have been lifted from the cold darkness and survived. They are stronger, because they made it out of that mine. Blessings to them and their families.

quarta-feira, 13 de outubro de 2010 16:35:34

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