

Climbing Everest is hard – doing it without bottled oxygen is excruciating

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Word Count **800**



In this May 2013 photo, tents are pitched on Camp 2 as climbers rest on their way to the summit of 29,035-foot-tall Mount Everest. May is the most popular month for Everest climbs because of more favorable weather. Photo: AP Photo/ Pasang Geljen Sherpa

Trying to catch your breath at the top of Mount Everest is no easy task. That high up, there is very little oxygen in the air. For every step you take, you have to take about 15 breaths.

This is how Ed Viesturs describes approaching the summit of Mount Everest without the benefit of bottled oxygen.

Viesturs is the only American to reach the top of all 14 of the world's 8,000-meter peaks. He scaled them all without using extra oxygen. In the thin air, he said, one wrong movement and "all of a sudden you lay there for 10 minutes trying to catch your breath."

Very Few Climbers Go Without Oxygen

Most people who climb Everest use extra oxygen, which they carry in bottles. Only 3 out of 100 climbers who make it to the top of Everest don't use it. Many have died trying.

This month, several hundred climbers reached the top of Everest, at least four died and more are still climbing. Very few will reach the peak without oxygen.

Among those trying are two U.S. climbers, expedition guide Adrian Ballinger of Squaw Valley, California, and National Geographic photographer Cory Richards of Boulder, Colorado.

In the thin atmosphere on Everest's peak, 29,035 feet up, each breath pulls in less than a third of the oxygen of a breath at sea level.

Many people assumed climbing without oxygen was impossible until 1978, when Reinhold Messner and Peter Habeler did it. Messner later wrote that he felt like "nothing more than a single narrow gasping lung, floating over the mists and summits" during his climb.

Without Enough Oxygen, The Human Body Is Slowly Dying

A Mexican climber reached the top of Everest without oxygen on May 12. Before that, the most recent summit without oxygen, and the most recent death without it, occurred four days apart in May 2013.

"Even if you're using bottled oxygen at extreme altitude, you can't get nearly enough oxygen to feel good or be completely safe," said Peter Hackett, founder of the Institute for Altitude Medicine in Telluride, Colorado. "Without oxygen, your body is slowly dying."

The lack of oxygen, called hypoxia, causes many physical effects, Hackett said. Breathing gets faster as the body tries to pull in more oxygen. Physical tasks become harder because muscles require oxygen. Breathing requires extra effort.

Appetite decreases and food isn't absorbed efficiently. This makes climbers even more tired. Some become too exhausted to melt snow for water and then get dehydrated.

Blood thickens as the body produces more oxygen-carrying red cells. Frostbite becomes more likely. Sleeping is difficult. Less sleep and less oxygen combine to slow thinking and cloud judgment.

People may hallucinate, take risks they shouldn't or become too tired. They may sit down and never get up. Some people get sick. It starts with headache and stomachache. It can progress to poor body control, confusion, swelling in the brain, fluid in the lungs and death. Some climbers who appear fine discover later that they've suffered permanent brain damage.

Why Do It? Because Oxygen Makes It Too Easy

Given the risks, why would anyone want to go up Everest without oxygen?

"If I'm going to go to a mountain that's 29,000 feet high like Everest, I want to climb that 29,000-foot mountain," said Viesturs, 56. He last climbed Everest in 2009. He said he tries to climb the mountain "under its terms." He finds this more interesting than trying to "bring the mountain down."

In other words, Viesturs does not want to use bottled oxygen because he doesn't want to make reaching the top of Everest easier. Some climbers like Viesturs consider using bottled oxygen cheating.

Scientist Thomas F. Hornbein climbed Everest in 1963. He calculated that the summit feels only half as high to a person resting and breathing bottled oxygen. Even when working hard and breathing hard, the mountain still seems a mile lower than it actually is.

A Fine Line Between Success And Death

Ballinger and Richards said they are not being overly risky by choosing not to use oxygen. They spent weeks adjusting to the altitude. Ballinger slept in a tent designed to mimic the oxygen level at the top of Everest. During their climb, they will have contact with medical professionals through satellite Internet. They have a supply of emergency oxygen stashed at 26,000 feet.

"What scares me is how I will walk that fine line between success and death," Ballinger said before the climb. "I want to try to find that line and stay on the correct side of it."

This may not be up to him, said Hackett. Extreme altitude tolerance may have more to do with genetics than fitness or preparation.

"Without oxygen," Viesturs said, "99 percent of the people who have climbed Everest wouldn't have climbed Everest."

Quiz

- 1 Which paragraph from the section "A Fine Line Between Success And Death" BEST explains why Ballinger and Richards want to climb Everest without oxygen?
- 2 Which paragraph from the article BEST suggests that climbing Everest without oxygen has become more popular over the years?
 - (A) Many people assumed climbing without oxygen was impossible until 1978, when Reinhold Messner and Peter Habeler did it. Messner later wrote that he felt like "nothing more than a single narrow gasping lung, floating over the mists and summits" during his climb.
 - (B) A Mexican climber reached the top of Everest without oxygen on May 12. Before that, the most recent summit without oxygen, and the most recent death without it, occurred four days apart in May 2013.
 - (C) "If I'm going to go to a mountain that's 29,000 feet high like Everest, I want to climb that 29,000-foot mountain," said Viesturs, 56. He last climbed Everest in 2009. He said he tries to climb the mountain "under its terms." He finds this more interesting than trying to "bring the mountain down."
 - (D) In other words, Viesturs does not want to use bottled oxygen because he doesn't want to make reaching the top of Everest easier. Some climbers like Viesturs consider using bottled oxygen cheating.
- 3 Which detail would be MOST important to include in a summary of the article?
 - (A) In the thin atmosphere on Everest's peak, 29,035 feet up, each breath pulls in less than a third of the oxygen of a breath at sea level.
 - (B) Many people assumed climbing without oxygen was impossible until 1978, when Reinhold Messner and Peter Habeler did it.
 - (C) Before that, the most recent summit without oxygen, and the most recent death without it, occurred four days apart in May 2013.
 - (D) He calculated that the summit feels only half as high to a person resting and breathing bottled oxygen.
- 4 What is the BEST summary of the section "A Fine Line Between Success And Death"?
 - (A) Modern technology has made climbing Everest without oxygen safer and easier than ever before.
 - (B) Practically all of the people who have successfully climbed Everest have done so using oxygen tanks.
 - (C) The danger involved in mountain climbing without oxygen is exactly what attracts people to attempt it.
 - (D) A person's tolerance to extreme altitudes may have more to do with their genes than their fitness or preparation.