

AUGUST 24, A.D. 79. Adeafening boom roars through Pompeii's crowded marketplace. The ground shakes violently, throwing the midday shoppers off balance and toppling stands of fish and meat. People start screaming and pointing toward Mount Vesuvius, a massive volcano that rises above the bustling city, located in what is now southern Italy.

Vesuvius had been silent for nearly 2,000 years, but it roared back to life, shooting ash and smoke some 20 miles into the air. Almost overnight, the city and most of its residents vanished under a blanket of ash and lava.

Now, almost 2,000 years later, scientists agree that Vesuvius is overdue for another major eruption-but no one knows when it will happen. Three million people live in the

volcano's shadow, in the modern-day city of Naples, Italy, Correctly predicting when the eruption will take place will make the difference between life and death.

The sky is falling

Through excavations that started in 1748 and continue to this day, scientists have been able to recreate almost exactly what happened in Pompeii on that terrible day.

"The thick ash turned everything black," says Pompeii expert Andrew Wallace-Hadrill, "People couldn't see the sun. All the landmarks disappeared. They didn't have the foggiest idea which way they were

Some people ran for their lives, clutch-ing their valuable coins and jewelry. Other

people took shelter in their homes. But the debris kept falling. Piles grew as deep as nine feet in some places, blocking doorways and caving in roofs.

Around midnight, the first of four searing-hot clouds, or surges, of ash, pumice, rock, and toxic gas rushed down the mountainside. Traveling toward Pompeii at up to 180 miles an hour, it scorched everything in its path, Around 7 a.m., 18 hours after the eruption, the last fiery surge buried the city.

Lost and found

Visiting the ruins of Pompeii today is like going back in time. The layers of ash actually helped preserve buildings, artwork, and even the forms of bodies. "It gives you the

ancient world." Wallace-Hadrill says. There are kitchens with pots left on the stove and bakeries with loaves of bread—now turned to charcoal—still in the ovens. Narrow corridors lead to magnificent mansions with elaborate gardens and fountains. Mosaics, or designs made out of tiles, decorate the walls and floors. Some houses even have mosaics of guard dogs with "Beware of dog" written in Latin, the language of the Pompeians.

Ancient graffiti, including love notes and other messages, is carved into buildings. Some graffiti even lists the results of gladiator matches at the amphitheater an ancient outdoor arena—where trained fighters once battled to the death.

Warning signs

Pompeii may be ancient history, but there's little doubt that disaster will strike again. Luckily people living near Vesuvius today will likely receive evacuation warnings before the volcano blows.

Scientists are closely monitoring Vesuvius for shifts in the ground, earthquakes, and rising levels of certain gases, which could be signs of an upcoming eruption. The Italian government is also working on a plan to help people flee the area in an

It's a shame Pompeians didn't know what we now know about volcanoes. They could have lived on to tell the story of the

Creepy casts

Volcanic ash settled around many of the victims at the moment of death. When decayed, holes remained inside the solid ash. Scientists poured

