



1
00:00:00,950 --> 00:00:05,270

Good news! Scientists say the Antarctic ozone hole is on the road to recovery.

2
00:00:05,730 --> 00:00:11,480

The amounts of ozone-depleting substances grew rapidly in our atmosphere in the 80s and early 90s,

3
00:00:11,890 --> 00:00:17,100

but had stopped growing in late 90s because of the 1987 Montreal Protocol.

4
00:00:17,380 --> 00:00:21,560

As levels of these manufactured chemicals have decreased in the last 14 years

5
00:00:21,580 --> 00:00:24,400

the ozone hole has seen a slight improvement.

6
00:00:25,320 --> 00:00:30,650

Today, satellite observations by NASA and NOAA show the peak size of this year's ozone hole

7
00:00:30,670 --> 00:00:36,990

measured 9.3 million square miles—an area roughly the size of North America.

8
00:00:37,210 --> 00:00:40,290

This area is smaller than holes observed in past years

9
00:00:40,310 --> 00:00:43,700

and significantly less than the largest hole on record.

10
00:00:44,010 --> 00:00:47,310

But scientists say the decrease of ozone-depleting substances

11
00:00:47,310 --> 00:00:50,680

isn't the only factor that has contributed to these improvements.

12
00:00:51,200 --> 00:00:56,650

Rising temperatures in an upper layer of the atmosphere known as the stratosphere may also play a role.

13
00:00:57,220 --> 00:01:01,710

Colder temperatures over the polar regions have been shown to promote ozone depletion

14

00:01:01,730 --> 00:01:04,300

while warmer temperatures lead to increased ozone.

15

00:01:04,790 --> 00:01:08,180

Years with warmer temperatures generally had smaller holes

16

00:01:08,200 --> 00:01:10,900

while colder temperatures had larger holes.

17

00:01:11,390 --> 00:01:15,180

So how much of the ozone hole's recovery is due to rising temperatures

18

00:01:15,200 --> 00:01:18,520

versus decreasing levels of manufactured chemicals?