

## CNN News Highlights — Forever Chemicals in Water

|                   |                 |                |          |               |              |
|-------------------|-----------------|----------------|----------|---------------|--------------|
| 1) consumer items | 2) dental floss | 3) potentially | 4) repel | 5) substances | 6) synthetic |
|-------------------|-----------------|----------------|----------|---------------|--------------|

You may have never heard of PFAS, but you're likely to have these \_\_\_\_\_ dangerous chemicals inside your body. Perfluoroalkyl and polyfluoroalkyl are \_\_\_\_\_ that are known as forever chemicals.

These \_\_\_\_\_ chemicals were developed in the 1940s that are used to \_\_\_\_\_ oil and water. They make \_\_\_\_\_ non-stick and waterproof, stain resistant, and they're found in many products you likely use. Some obvious, non-stick cookware, waterproof clothing, but also in things you may not necessarily realize, \_\_\_\_\_, pizza boxes, microwave popcorn bags, even makeup and sunscreen.

|               |               |                   |            |            |            |
|---------------|---------------|-------------------|------------|------------|------------|
| 1) accumulate | 2) break down | 3) breakneck pace | 4) decades | 5) durable | 6) to date |
|---------------|---------------|-------------------|------------|------------|------------|

Now over the last several \_\_\_\_\_, these chemicals have been developed at this \_\_\_\_\_ with now more than a 9,000 PFAS related chemicals \_\_\_\_\_. And again, they're called forever chemicals because they don't \_\_\_\_\_ completely, meaning the same properties that make these chemicals so \_\_\_\_\_ also make them extremely hard to get rid of, meaning they \_\_\_\_\_ in the environment, in animals, and yes, they accumulate in us, humans.

|                 |                  |                 |              |                      |          |
|-----------------|------------------|-----------------|--------------|----------------------|----------|
| 1) contaminated | 2) contamination | 3) cumulatively | 4) estimated | 5) measurable levels | 6) toxic |
|-----------------|------------------|-----------------|--------------|----------------------|----------|

Thousands of communities across the United States have drinking water that is \_\_\_\_\_ with PFAS and as a result, more than 200 million Americans could have \_\_\_\_\_ PFAS in their drinking water, according to the Environmental Working Group.

And here's the thing: nearly all people have \_\_\_\_\_ of PFAS in their bodies. In fact, it's \_\_\_\_\_ that 98 percent of the U.S. population has some level of PFAS \_\_\_\_\_ and for individuals exposed on a regular basis to chemicals build up \_\_\_\_\_.

|             |                                  |              |                       |                          |         |
|-------------|----------------------------------|--------------|-----------------------|--------------------------|---------|
| 1) at scale | 2) extent of the threat posed by | 3) linked to | 4) prolonged exposure | 5) relatively early days | 6) soil |
|-------------|----------------------------------|--------------|-----------------------|--------------------------|---------|

Now, I want to be clear. These are \_\_\_\_\_, and we still don't fully understand the \_\_\_\_\_ these chemicals. PFAS have been \_\_\_\_\_ cancer and kidney and liver damage and other serious health problems in people with \_\_\_\_\_.

As for reversing the damage that has already been done, large treatment is expensive \_\_\_\_\_. It's even harder, if not impossible, to remove PFAS from \_\_\_\_\_ or the environment.

|                     |          |           |              |                    |                |
|---------------------|----------|-----------|--------------|--------------------|----------------|
| 1) activated carbon | 2) avoid | 3) filter | 4) reheating | 5) reverse osmosis | 6) steer clear |
|---------------------|----------|-----------|--------------|--------------------|----------------|

But here's what you can do until a cheaper, more effective solution is found. You can \_\_\_\_\_ stain- and water-resistant products and sprays. If you order delivery or take out from restaurants, remove your food from takeout containers before \_\_\_\_\_. In cooking at home, \_\_\_\_\_ of non-stick cookware and \_\_\_\_\_ your drinking water with \_\_\_\_\_ or \_\_\_\_\_, if possible.

## Translation

您可能從未聽說過 PFAS，但您的體內很可能含有這些潛在危險的化學物質。全氟烷基和多氟烷基物質是被稱為「永久化學物質」的物質。

這些合成化學品始於 1940 年代，用於抗油和防水。它們使消費品具有不粘和防水、防污的特性，而且它們存在於您可能經常使用的許多產品中。一些明顯的用途包括不粘鍋具、防水衣物，但也包括您可能沒有意識到的物品，如牙線、披薩盒、微波爐爆米花袋，甚至是化妝品和防曬霜。

現在，在過去幾十年裡，這些化學物質的開發速度驚人，目前已有超過 9000 種相關的 PFAS 化學物質。再次強調，之所以稱它們為「永久化學物質」，是因為它們不會完全分解，這意味著使這些化學物質如此耐用的相同特性也使它們極難去除，因此它們在環境、動物體內累積，是的，也在我們人類體內累積。

美國數千個社區的飲用水受到 PFAS 污染，因此，根據環境工作組的數據，超過 2 億美國人的飲用水可能含有有毒的 PFAS。

而且重點是：幾乎所有人體內都有可測量的 PFAS 水平。事實上，據估計，98% 的美國人口存在某種程度的 PFAS 污染，對於經常接觸這些化學物質的人來說，化學物質會逐漸累積。我想明確一點。這些還是相對初期的階段，我們仍未完全理解這些化學物質所帶來的威脅範圍。PFAS 與癌症以及腎臟和肝臟損傷和其他嚴重健康問題有關，尤其是在長期暴露的人群中。

至於扭轉已經造成的損害，大規模的治療非常昂貴。從土壤或環境中移除 PFAS 更是困難，甚至可能是不可能的。

但這裡有一些您可以做的事情，直到找到更便宜、更有效的解決方案。您可以避免使用抗污和防水產品和噴霧。如果您訂購外送或外帶餐點，請在加熱前將食物從外帶容器中取出。在家烹飪時，避免使用不粘鍋具，並儘可能使用活性炭或逆滲透過濾您的飲用水。



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## Answers

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You may have never heard of PFAS, but you're likely to have these 3) potentially dangerous chemicals inside your body. Perfluoroalkyl and polyfluoroalkyl are 5) substances that are known as forever chemicals.

These 6) synthetic chemicals were developed in the 1940s that are used to 4) repel oil and water. They make 1) consumer items non-stick and waterproof, stain resistant, and they're found in many products you likely use. Some obvious, non-stick cookware, waterproof clothing, but also in things you may not necessarily realize, 2) dental floss, pizza boxes, microwave popcorn bags, even makeup and sunscreen.

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Now over the last several 4) decades, these chemicals have been developed at this 3) breakneck pace with now more than a 9,000 PFAS related chemicals 6) to date. And again, they're called forever chemicals because they don't 2) break down completely, meaning the same properties that make these chemicals so 5) durable also make them extremely hard to get rid of, meaning they 1) accumulate in the environment, in animals, and yes, they accumulate in us, humans.

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Thousands of communities across the United States have drinking water that is 1) contaminated with PFAS and as a result, more than 200 million Americans could have 6) toxic PFAS in their drinking water, according to the Environmental Working Group.

And here's the thing: nearly all people have 5) measurable levels of PFAS in their bodies. In fact, it's 4) estimated that 98 percent of the U.S. population has some level of PFAS 2) contamination and for individuals exposed on a regular basis to chemicals build up 3) cumulatively.

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| 1) at scale | 2) extent of the threat posed by | 3) linked to | 4) prolonged exposure | 5) relatively early days | 6) soil |
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Now, I want to be clear. These are 5) relatively early days, and we still don't fully understand the 2) extent of the threat posed by these chemicals. PFAS have been 3) linked to cancer and kidney and liver damage and other serious health problems in people with 4) prolonged exposure.

As for reversing the damage that has already been done, large treatment is expensive 1) at scale. It's even harder, if not impossible, to remove PFAS from 6) soil or the environment.

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But here's what you can do until a cheaper, more effective solution is found. You can 2) avoid stain- and water-resistant products and sprays. If you order delivery or take out from restaurants, remove your food from takeout containers before 4) reheating. In cooking at home, 6) steer clear of non-stick cookware and 3) filter your drinking water with 1) activated carbon or 5) reverse osmosis, if possible.