



## How Hurricanes Are Named

### The Science and System Behind the Storm Names

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#### What Is a Hurricane?

A **hurricane** is a type of **tropical cyclone**—a large, rotating storm system that forms over warm ocean waters near the equator.

To be called a “hurricane,” a storm must reach **wind speeds of 74 mph or more**.


Tropical cyclones are called **hurricanes** in the Atlantic and Eastern Pacific, but they’re called:

- **Typhoons** in the Northwest Pacific
  - **Cyclones** in the South Pacific and Indian Ocean
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#### Why Do We Name Hurricanes?

Naming hurricanes helps scientists, emergency responders, and the public by:

- ✓ Making storm tracking and communication **clearer and faster**
- ✓ Helping avoid confusion when **multiple storms** happen at once
- ✓ Making warnings more **memorable and serious**

 **Scientific Importance:** When meteorologists use consistent names, it helps them collect data, model storm paths, and publish research without mix-ups.

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#### Who Chooses the Names?

Hurricane names are chosen by the **World Meteorological Organization (WMO)**, a United Nations agency.

Each region of the world has its **own name list**, created years in advance.

For the **Atlantic hurricane season**, the WMO uses:

- A list of **21 names per year**
- Names that **alternate between male and female**
- Names listed in **alphabetical order**

Names are chosen based on:

- Simplicity (easy to spell and pronounce)
  - Cultural familiarity for countries in the storm zone (Caribbean, North America, etc.)
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#### How Often Are Names Reused?

The WMO **rotates name lists every 6 years**, so most names are reused.

But if a hurricane is **especially deadly or costly**, its name is **retired** out of respect and to avoid confusion.

#### Retired Names Example:

- **Katrina** (2005) – Over 1,800 lives lost, massive flooding in New Orleans
  - **Maria** (2017) – Devastated Puerto Rico
  - **Ian** (2022) – Category 4 storm with major U.S. impacts
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## 2025 Atlantic Hurricane Names

A	B	C	D	E	F
Alberto	Beryl	Chris	Debby	Ernesto	Francine
G	H	I	J	K	L
Gordon	Helene	Isaac	Joyce	Kirk	Leslie
M	N	O	P	R	S
Milton	Nadine	Oscar	Patty	Rafael	Sara
T	V	W			
Tony	Valerie	William			

### Why no Q, U, X, Y, or Z?

There aren't enough widely used names starting with these letters, so the WMO skips them to avoid confusion.

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### + What If We Run Out of Names?

If more than 21 named storms form in one season (like in 2020), the WMO uses a **backup list of alternate names**, NOT the Greek alphabet (which caused confusion in the past).

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### Quick Science Facts

- Tropical cyclones **form over warm ocean water** (about 80°F / 27°C or warmer).
- They are powered by **heat and moisture** from the sea, which rise and create strong updrafts.
- Earth's **Coriolis effect** causes the storm to spin.
- Naming doesn't affect storm strength—it just helps us **track and talk** about it better.

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### Check Your Understanding

1. Why is it helpful for scientists to use the same names for hurricanes around the world?
2. What makes a hurricane's name get permanently retired?
3. What do you think could happen if multiple storms didn't have unique names?