

Name _____

How One Tiny Data Mistake Can Cause a Giant AI Meltdown

AI systems only learn what humans teach them. If people label data incorrectly - even a few examples - the AI starts learning *wrong patterns*. That's when small mistakes can snowball into big real-world problems.

Read the short story below, then follow the "chain reaction" from **bad labels** → **bad learning** → **bad results**.

At *QuickScan Medical Labs*, a group of new data labelers were helping train an AI to detect early signs of skin problems. They looked at thousands of photos and added labels like "healthy" or "possible issue."

But the team was rushing to meet a deadline. A few harmless freckles got labeled as "possible issue," and some dangerous spots were marked as "healthy." They thought it didn't matter - just a few mix-ups.

Months later, the AI was released to hospitals. It started giving strange results: It warned healthy people that something was wrong.

It missed real warning signs in sick patients.

Doctors were confused. Patients were scared. The company's AI system lost trust - all because of a few **bad labels** at the start.

Your Task: Follow the Chain of Errors

Fill in the steps below to show how the small mistakes led to big problems.

1. Bad Labeling: What labeling mistake started the problem?

2. Bad Learning: What did the AI learn that wasn't true?

3. Bad Predictions: How did the AI's behavior show those mistakes?

4. Real-World Consequence: What happened to people because of it?

5. Prevention: How could the labeling team or company have stopped this from happening?

