

SELFIE CAN SPOT THE EARLY SIGNS OF PANCREATIC CANCER

- **Pancreatic cancer is aggressive; patients have a 9% chance of living 5 years**
- **One of the only symptoms - yellowing eyes - usually appears in its late stages**
- **Researchers have developed an app to spot the early signs of yellowing**
- **The app analyzes a selfie of the eyes to spot elevated levels of bilirubin (bile)**
- **It had an 87% success rate in its first clinical trials**

By [Mia De Graaf For DailyMail.com](http://MiaDeGraafForDailyMail.com)

A new selfie app can tell you your risk of getting pancreatic cancer.

With few detectable symptoms, pancreatic cancer is one of the most deadly. Patients have a nine percent chance of surviving five years.

Now, researchers at the University of Washington have devised a method to spot the only concrete sign: yellowing of the eyes.

BiliScreen uses a smartphone camera to detect increased levels of bilirubin (a yellow substance found in bile) in the white part of your eye - even if you can't see it in a mirror.

Currently, the standard method to measure bilirubin levels is a blood test, but it is not routinely offered and can be costly.

Experts hope the app, which will be debuted on September 13 at a conference in Hawaii, could dramatically lower the rate of pancreatic cancer deaths.



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Breakthrough? BiliScreen uses a smartphone camera to detect increased levels of bilirubin (a yellow substance found in bile) in the white part of your eye - even if you can't see it in a mirror

In adults, the whites of the eyes are more sensitive than skin to changes in bilirubin levels.

It can be an early warning sign for pancreatic cancer, hepatitis or the generally harmless Gilbert's syndrome, since all of them affect the body's ability to control bile. Unlike skin color, changes in the sclera are more consistent across all races and ethnicities.

Yet by the time people notice the yellowish discoloration in the sclera, bilirubin levels are already well past cause for concern.

'The problem with pancreatic cancer is that by the time you're symptomatic, it's frequently too late,' said lead author Alex Mariakakis, a doctoral student at the Paul G. Allen School of Computer Science & Engineering.

The UW team wondered if computer vision and machine learning tools could detect those color changes in the eye before humans can see them.