SYMPTOM

# Cloudy urine

Cloudy urine looks hazy or milky instead of its usual clear yellow.

**WHAT IT FEELS LIKE**
Urine looks hazy, milky, or filled with floating particles

**WHERE IT IS FELT**
Urine seen in the toilet or collection cup

**MOST COMMON CAUSES**
Urinary infection, harmless crystals, vaginal discharge or semen

**WHEN IT IS URGENT**
Cloudiness with fever, side pain, vomiting, or trouble urinating

**USUALLY LASTS**
Hours to days, depending on hydration and the cause

**SEE A DOCTOR IF**
Cloudiness persists, returns, or comes with urinary symptoms

## Overview

Cloudy urine is urine that looks hazy, milky, or less clear than usual. You may notice sediment, threads, or small particles in it.

Cloudiness can come from harmless crystals, mucus, semen, or vaginal discharge mixing with urine. It can also happen when urine contains white blood cells, blood, bacteria, or excess protein.

A single cloudy sample, especially without pain or other symptoms, is not usually an emergency. Persistent cloudiness or cloudiness with burning, frequent urination, fever, or pain needs medical attention. Appearance alone cannot show whether you have an infection.

Urine may also become cloudy after it sits in a container because crystals form as it cools. A fresh, properly collected sample gives more useful information.

## What it may feel or look like

Cloudy urine may look:

Other symptoms can help narrow down the cause. These may include burning when urinating,

needing to urinate more often, passing only small amounts, lower abdominal discomfort, or a strong smell.

Pain in your back or side, visible blood, genital discharge, itching, fever, nausea, or vomiting may point to a problem that needs assessment. A strong smell by itself can result from concentrated urine, foods, or medicines and does not confirm an infection.

- Hazy rather than transparent
- White or milky
- Filled with fine particles or sediment
- Cloudy only near the start or end of urination
- Foamy as well as cloudy

## Common causes

Common explanations

A urinary tract infection can make urine cloudy because it adds white blood cells and bacteria. Other common symptoms include burning, urgency, frequent urination, and discomfort low in the abdomen. Cloudiness alone is not enough to diagnose an infection.

Harmless mineral crystals may appear when urine is concentrated or changes in temperature or acidity. This can be more noticeable if you have not had enough fluid, although dehydration more often makes urine dark yellow.

Vaginal discharge, menstrual fluid, or semen can mix with urine in the toilet or sample cup. This may cause temporary cloudiness without a problem in the urinary tract.

Less common causes

A kidney stone can cause blood, crystals, or inflammatory cells in urine. Stones may also cause sharp pain in the side or back, pain moving toward the groin, nausea, or urinary urgency.

Sexually transmitted infections can inflame the urethra, the tube that carries urine out of the body. Possible symptoms include genital discharge, burning with urination, pelvic discomfort, or testicular pain. Some infections cause few or no additional symptoms.

Kidney conditions can allow protein or blood cells to enter urine. Protein more often causes persistent foam than cloudiness, but the two can occur together. Swelling around the eyes or ankles may also develop.

Causes needing prompt attention

Cloudy urine with fever, chills, pain in the back or side, nausea, or vomiting may occur with a

kidney infection. A blocked urinary tract can cause severe pain or make it difficult or impossible to urinate.

These symptoms matter more than the cloudiness itself and should not be watched at home without medical advice.

## When to seek medical care

Arrange a routine appointment if cloudy urine:

Contact a healthcare professional the same day if cloudiness occurs with fever, chills, back or side pain, vomiting, or feeling significantly unwell. Seek prompt advice during pregnancy if you develop urinary symptoms, because urinary infections may need early treatment.

Seek emergency care if you cannot urinate, have severe or rapidly worsening pain, become confused or very drowsy, faint, or have trouble breathing. Large amounts of blood or blood clots in urine also need urgent assessment, especially if they interfere with urination.

- Lasts more than a few days or keeps returning
- Comes with burning, urgency, frequent urination, or lower abdominal pain
- Is accompanied by genital discharge, itching, or possible exposure to an infection
- Occurs with persistent foam, swelling, or visible blood

## How the cause is found

A healthcare professional may ask when the cloudiness began, whether it happens every time, and whether you have pain, fever, discharge, or changes in urinary frequency. Relevant details can include pregnancy, recent sexual contact, kidney stones, urinary procedures, medicines, and fluid intake.

A urinalysis examines a fresh urine sample. A dipstick can detect signs such as blood, protein, white blood cells, and nitrites. Nitrites may be produced by certain bacteria. Looking at urine under a microscope can show cells, bacteria, or crystals.

A urine culture may be used to identify bacteria and help select an antibiotic when appropriate. Tests for sexually transmitted infections may use urine or a swab.

Blood tests or imaging, such as an ultrasound or computed tomography scan, may be considered if there are signs of kidney problems, stones, blockage, or a more serious infection. Not everyone with cloudy urine needs these tests.

## Treatment and self-care

Treatment depends on what is making the urine cloudy. Cloudiness itself does not need a specific treatment.

If you may be mildly dehydrated, drink enough water to keep your urine pale yellow unless a healthcare professional has told you to limit fluids. There is no need to force large amounts of water.

A bacterial urinary infection may require a prescribed antibiotic. Do not use leftover antibiotics or someone else's medicine. Cloudy urine without other evidence of infection should not be treated with antibiotics on appearance alone.

Kidney stones, sexually transmitted infections, and kidney conditions each need treatment aimed at the underlying cause. If vaginal discharge or semen is affecting the sample, a clean-catch urine sample may clarify whether the urine itself is cloudy.

While monitoring the symptom, note any pain, fever, visible blood, discharge, or change in how often you urinate. These details can help during an appointment.

## What to expect

Cloudiness caused by concentrated urine or material mixing with the sample may clear within hours after hydration or the next time you urinate.

When an infection or another medical condition is responsible, the urine usually improves as the cause is treated. Symptoms that persist despite treatment, return often, or become more severe should be reassessed.

Do not rely only on urine becoming clear. Pain, fever, or difficulty urinating still needs attention even if the urine's appearance improves.

## Common questions

Does cloudy urine always mean a urinary tract infection?

No. Infections are one possible cause, but crystals, concentrated urine, vaginal discharge, semen, blood, and protein can also change the appearance. A urine test is often needed when other symptoms are present.

Can food make urine cloudy?

Foods more often change urine's colour or smell than its clarity. Diet can affect urine acidity

and crystal formation, but repeated cloudiness should not automatically be blamed on food.

Is cloudy urine during pregnancy normal?

Discharge can mix with urine during pregnancy, but cloudy urine with burning, urgency, pain, fever, or a strong new smell needs prompt medical advice. A urine test can check for infection.

How should I collect a urine sample?

Wash your hands and follow the instructions provided. Usually, you begin urinating into the toilet, collect the middle part of the stream in the sterile cup, and finish in the toilet. Avoid touching the inside of the cup or lid.

## Sources

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