# Your toilet is clogged! What now?

## In this lesson, you will learn how to:

- Clear simple toilet clogs
- Recognize when a plumber is needed to clear a clog



# PREPARATION

#### Step 1: Understand what objects are causing the clog

Clogs can be caused by attempting to flush objects and material which should never be disposed of in a toilet. Such objects include (but are not limited to):



If any of the objects/materials listed above, or similar types, have been flushed in the toilet, creating a clog, do not attempt to remove the clog yourself, as you could damage the toilet and pipes, or hurt yourself. Instead, call a plumber to assist you.



The objects shown here can also cause clogs, and should never be disposed of in a toilet. However, you may be able to clear clogs caused by these items.

The only materials that should be disposed of in a toilet are:

- Urine or thin liquids (such as beverages)
- Fecal matter
- Toilet paper
- Powders

Often, fecal matter, toilet paper, powders, and/or gels can get stuck and build up in the pipe, causing a partial or total clog.

So let's get rid of it!







### **Step 2:** Gather the tools you need to have available

**Warning:** Never use drain cleaning liquids, gels, or powders in the toilet. These can cause permanent damage. *Here is why.*<sup>1</sup>

#### Have all the tools you need handy before you start

- Rubberized protective gloves
- 5-gallon bucket or pail
- Flange-type plunger <u>What is this?</u><sup>2</sup>
- Plastic drop cloth

Note: You may not need to use all tools for every clog.





#### Step 3: Determine whether the toilet is *totally* or only *partially* clogged

Clogs can occur anywhere within the waste disposal system. Often the clog occurs in a section of the pipe called the S-Trap. The S-Trap is a zigzag section of pipe that traps liquid and odors to keep them from backing up and escaping through the toilet. The diagram below shows the S-Trap enlarged, and shows

what it looks like inside when there is a partial clog, It is important to know whether there is a partial or total clog, as each must be treated differently. The same S-Trap is shown on the next page, this time with a total clog. Note the direction of the water in both.

> Partial clog (slow drain)



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The difference between a total clog and a partial clog can be summarized as follows:

Total Clog	Partial Clog
Allows nothing to move through the drainpipe	Will let some liquid through slowly
The toilet bowl (basin) will be full or nearly full	Usually leaves very little or no wa- ter in the toilet bowl (basin)



**Warning:** Never attempt to flush a totally clogged toilet as the toilet basin will overflow, causing a flood of waste water on the bathroom floor.



#### Step 4: Wear protective gloves and cover the floor

- Put on the protective gloves to cover hands, wrists and forearms.
- Arrange the drop cloth to cover the floor surrounding the toilet.



#### Step 5: Remove most of the waste water remaining in the toilet

For a totally clogged toilet, use the pail to bail out as much of the waste water as possible. Dispose of the waste water in an outside sewer grate.

**Do not** attempt to dispose of the waste water in a sink or bathtub, as it may create a clog there and may pose a biohazard risk.

#### Step 6: Shut off the water supply to the toilet

6.1 Locate the water valve connected to the drainpipe behind the basin.

6.2 Turn the water valve clockwise until it is in full closed position.

6.3 Do not overtighten the valve; it could break or fail to open later.

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# THE HOT WATER METHOD

#### Step 7: Fill the bucket or pail with very hot water

Fill the bucket or pail with approximately 4 gallons of very hot (but never boiling) water from the bathtub or sink. <u>*Why hot water?*</u><sup>3</sup>

### Step 8: Pour water from the pail into the

#### toilet

- 8.1 Pour approximately half of the water into the toilet.
- 8.2 Watch to see if the water drains easily.
- 8.3 If the basin does not clear immediately, wait 5minutes and pour the other half of the water into the toilet.
- 8.4 If the basin does not clear immediately, wait 5 more minutes.
- 8.5 If the water is draining slowly, you can repeat Steps 7 and 8.
- 8.6 If the water drains immediately, complete the process by skipping to **Step 18**. If the water is still not draining, proceed to **Step 9**.





# THE PLUNGER METHOD

- Step 9: Refill the bucket or pail with very hot (not boiling) water
- Step 10: Pour approximately one gallon of very hot water from the bucket or pail

#### **Step 11: Position the plunger in the toilet basin**

- 11.1 With the stick handle of the plunger pointing toward the ceiling, place the rubber end of the plunger into the toilet basin.
- 11.2 Slide the flange of the plunger into the opening of the toilet basin.
- 11.3 Position the plunger to make an airtight and watertight seal between the plunger and the ceramic sides of the basin.

#### Step 12: Firmly grasp the plunger

With the flange end of the plunger in place, grip the opposite end of the plunger stick firmly with both hands.

Place one hand over the top of the stick, with the other hand to the immediate side to keep the plunger steady.



#### Step 13: Depress the plunger

- Keeping a tight grip on the plunger stick, press directly down to compress the plunger's rubber cup toward the toilet basin opening.
- Make sure you keep the flange fully sealed against the toilet basin opening.

*How it works:* 

The downward thrust of the plunger pushes air and water down the drainpipe, with enough force to dislodge the clog.

#### Step 14: Pull up the plunger

Pull up on the plunger stick so that the rubber cup is in its original position.

Pull the plunger up rapidly, but be careful not to pull up too hard, as this may cause a messy splashback.

How it works:

The upward movement of the plunger creates suction, pulling in air and water with enough force to dislodge the clog.

Repeat the down and up action five more times in rapid succession.

Always maintain the airtight/watertight seal, otherwise the forced air and water will escape out the sides of the plunger, dissipating the force required to remove the clog, and eliminating the suction action.



#### Step 15: If the toilet is still clogged, repeat plunging

If the toilet is still clogged, **wait five minutes** and then repeat the plunging action once, **steps 9 through 14**.

#### Step 16: If the toilet is still clogged, call a plumber

If the pipe is still obstructed at this point, it is likely that:

- There is a solid obstruction that cannot be broken up by the force of air and water from the plunger.
- The pipe is damaged, blocking the opening.
- The obstruction or clog is too far down the pipe. The force of air and water dissipates if it must travel too far from the plunger.

At this point, you must contact a professional plumber to dismantle or replace the pipe or toilet. Keep the water valve in the off position. Clean the plunger (**Step 20**).

## Wait for the plumber before doing anything further.

# FINISHING THE JOB WHEN THE CLOG IS CLEARED

#### Step 17: Turn the water supply to the toilet back on

Turn the water valve behind the toilet basin counter-clockwise until you meet resistance. The valve will be all the way open, do not force the valve too far as it might break.

#### Step 18: Flush the toilet

- 19.1 Flush the toilet once to drain the water from the toilet tank.
- 19.2 Wait for the tank to refill.
- 19.3 If it does not refill or refills slowly, make sure the water valve is all the way open.
- 19.4 Once the tank refills, flush again to make sure the flush is working properly.

#### Step 19: Clean the plunger

If you have used the plunger, make sure to clean it thoroughly with soap and water.

#### Step 20: Flush the toilet once more

Flush the toilet one more time, just to enjoy the sound of a properly working toilet. You will never take a toilet for granted again!

"Your Toilet is Clogged! What Now?"

Thank you for taking this brief survey. Your answers will help me evaluate the instruction program and make future improvements.

Were you successful at clearing the clogged toilet?					
Unsuccessful	2	Partially Successful 3	4	Completely Successful 5	
Did you call a professional plumber for help? Yes No					
If so, how did the plumber resolve the problem?					
How confident are you that you could clear a clog in the future without instructions?					
Not confident	at all			Very Confident	
1	2	3	4	5	
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Please use the space below to provide any comments or suggestions you have regarding this lesson.



#### <sup>1</sup>Why you should never use drain cleaning solvents to clear a toilet clog.

Drain cleaning solvents comprise caustic, corrosive, highly concentrated chemicals, such as sodium hydroxide (a toxic base), or sulfuric acid. These chemicals act on obstructions by creating heat when mixed with water. The corrosive heat produced can melt or crack the porcelain or PVC pipe material. Permanent damage to the drain components can result. Return to page

#### <sup>2</sup>What is a flange-type plunger?

There are two common types of plungers: Cup plungers and Flange-type plungers (also known as toilet plungers). The toilet lusher provides cold water to move waste down the drain. Clogs are usually sticky; adding more cold water will tend to harden the sticky substance, while hot water will tend to somewhat dissolve it. Never use boiling water, as it could damage ceramic or PVC pipe material. **Return to page** 

#### <sup>3</sup>Why use hot water to clear a toilet clog?

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