



## Creating a Pressure Washer Design Challenge

### DESIGN CHALLENGE Notes:

This design challenge explores how to create a high pressure stream of water to promote health, safety, and sanitation.

For a better understanding of [pressure washing](#), go [here](#).

**Problem:** We need to make sure rabbit bottoms and feet remain health and sterile

**Challenge:** Pressure seems like an obvious thing, right? But what kind of pressure can sterilize things? How do we amplify the power of water to destroy bacteria?

### Materials:

We need a hose and water already under pressure  
We need an attachment that can restrict the flow of water  
We need an attachment that further restricts the flow of water  
We need a heavy duty hose  
We need long sleeves  
We need eye goggles

### Brainstorm:

1. What is pressure?
2. Does city water have pressure? How?
3. What can we do to create more pressure?
4. Why does pressurized water act as a disinfectant?
5. Does pressurized water hurt us?

### Design/Build:

1. Determine an area that you need to clean
2. How can you amplify the pressure of water?

### Test:

What happens when you try your design?  
Can you INCREASE or decrease pressure?  
Can we tell it is working? How?

### Evaluate:

- How will you record your results?
- How will you know how much of each component you have is doing what?
- Can you create different types of dirty materials and test them?
- What would you do differently?

### Share:

- Record your tests on a chart.
- Which combination or shape of pressure worked best?
- How did you know?