ELCA WORLD HUNGER'S WALK HUNGER'S WORLD HUNGER'S

DO-IT-YOURSELF TRACK EXPERIENCE



**ELCA World Hunger Evangelical Lutheran Church in America** God's work. Our hands.

## INTRODUCTION

ELCA World Hunger's Walk for Water is an opportunity for youth and adults to experience firsthand what it is like to carry a 5-gallon jug of water (41.5 pounds) through a simulated water collection experience. Throughout the simulation each person follows one of five "stories" to guide them along the track. Along the way, participants are confronted with different obstacles that help them realize some of the struggles those walking for water may encounter.

The distance around the track at the ELCA Youth Gathering, where this experience was first introduced, was one-tenth of a mile (528 feet). This is much shorter than the average 3.7 miles a woman in Africa must walk each day to retrieve water for her and her family. ELCA World Hunger's Walk for Water can provide an excellent learning opportunity for participants (recommended for junior high+) to realize that they would need to travel about 37 times around a track that size to walk that same 3.7 mile distance.

With a story based in the United States, it is also a great way to kick start conversations about water crises in the United States, too. One participant from the Gathering said, "You can read about [such statistics] as much as you want, but until you do it, that's what makes you realize just how hard it is. Otherwise, it's just numbers." In essence, the Walk for Water is a way for participants to move beyond the statistics and numbers and realize how important it is for all people to have accessible clean water.

This guide is intended to help you set up your own, Do-it-Yourself (DIY) Walk for Water experience. The set-up is based on how ELCA World Hunger designed the track at the ELCA Youth Gathering, but you are encouraged to be creative in your context!

### SETTING UP THE TRACK

#### **MATERIALS NEEDED**

□ Track story signs

See page 14

□ Factoid signs

See page 36

#### □ Barrier for the track

For example: plastic cones and rope, latticework, PVC pipes, chairs, chalk outline if on pavement)

Jugs

(Any kind of jug can be used, but try to find one that holds 5 gallons with a closed top. We recommend the 5-gallon Scepter Water Can sold for \$15 at Amazon.com.)

#### □ 4 colors of tape, string or fabric

Use these or another method to mark the jugs of water

### **GETTING STARTED**

The track can be set up inside, but if weather permits, outside is even better. Measure off one-tenth of a mile for the whole track. It can be set up any way that is convenient for your group. Each person will pick up one jug and follow the story based on the color of tape or string on their jug. There are five stories – blue, yellow, red, orange and green.

The story signs are in order in the files; set these up at various points around the track in order, making sure to leave room for up to three obstacles. Story sign #1 should go right at the start of the track, with story sign #2 close behind.

### **CREATING OBSTACLES**

In the track at the Youth Gathering, ELCA World Hunger had three obstacles: a flood, a heat tent and a small hill. Some of these take significantly more planning than others, so you may want to use one or two, rather than all of them.

**FLOOD:** The purpose of this obstacle is to highlight the crises that can be caused by too much water and the risks to health posed by unclean water. This can be as simple as laying a blue tarp down in the middle of the track so everyone has to walk through it. Or, if you are outside, you can set up a sprinkler aimed at the obstacle. Immediately following the flood, we had a health clinic focused on water-related diseases. More information on that is below.

**HEAT TENT:** The purpose of this obstacle is to help participants experience briefly some of the factors that make walking for water very hard work. If you are inside, you can set up space heaters in a room that all walkers have to travel through. Exercise caution with these; make sure that an adult is present in or near the room at all times. One alternative is to use flood lights or workshop lights to symbolize the bright sunlight. Or, if you are outside in warm weather, you can instruct walkers to put on a heavy coat for one minute.

**BUMP IN THE ROAD:** This obstacle is designed to help participants reflect on the challenges people face when they have to walk for water on uneven or treacherous terrain. For this obstacle, you can have them walk up stairs or walk over or under playground equipment, if outside. Be creative! The point is to help them see the walk as work and not an ambling stroll. It's a good idea, too, to be aware of your participant's different abilities. If someone is not able or comfortable doing this obstacle, help them find a way around.

### **CREATING A CLINIC**

If you want to deepen your Walk for Water experience, you can easily create a health clinic about water-related diseases. This is best placed immediately after the flood obstacle. Be sure to have one or two people in the tent to help direct participants. To help make this more efficient, mark the water jugs with numbers that signify one of the three diseases: 1 for diarrhea, 2 for malaria and 3 for worms. When participants reach the clinic, have a volunteer check their number and direct them to the right activity. Use handouts in the back of this guide to pass out to participants.

**LEAD POISONING –** To add this supplement to your track, you may want to display some fresh vegetables like leafy greens alongside low-fat dairy. These are foods that children impacted by lead need to mitigate the effects of lead on their brains and other bodily systems. You can also have some elementary school study books to use as visuals for talking about the extra help students affected by lead may need.

**DIARRHEA** – At the Youth Gathering, ELCA World Hunger built a three-seater latrine. If you have access to a latrine or a toilet, that's great! Otherwise, you can also use a chair or a bench.

**MALARIA** – This can also be just a chair or a bench, though it works best if there is a cot or couch for walkers to lie on.

**WORMS** – The purpose of this activity is to highlight the risks of drinking unsanitized water. Fill three canning jars with water – one with clear water, one with visibly dirty water, and one slightly tinted with a drop of yellow food coloring. Label the bottom of each jar. Label the clear water "nitrates," label the dirty water "cholera" and label the yellow water "sanitized." Ask participants which water they would drink and then show them the labels. The yellow water has been sanitized with iodine; the other jars contain contaminated water that can make them sick. Remind them that it is impossible to tell if water is safe just by sight. Many of the programs ELCA World Hunger supports help train people in water sanitation.

## PREP FOR THE WALK

Here is a script you can use to introduce water and water crises to your group before they walk the track.

- 1) How do you use water at home? Try to think of as many ways as you can.
- 2) What about at school or church? (look for "baptism" as a response) Water is a major part of our life in church. In the water of baptism, we are born again as children of God. Many of the decorations in a church have images of water – streams, rivers, rain. And the Bible is filled with stories of water.
- 3) What stories from the Bible involve water? (possible responses: Noah and the flood, Jonah, the Israelites crossing the Red Sea, water coming from rocks in Exodus, Jesus and the woman at the well, John the Baptist at the Jordan, Jesus walking on water, Jesus as living water)

Many of the people in the Bible lived in very dry parts of the world. Having water meant everything to them. Water – too much of it, too little of it, just enough of it – was one way they saw God acting in the world. God blessed the people by sending rain to water their fields. Jesus promised that people who followed him would never thirst. John the Baptist and followers of Jesus used water to mark people in baptism, and floods were seen as God's judgment.

Water is still very important to us.

4) How would your life be different if you didn't have water? (look for answers: nothing to drink, no way to grow food, no way to wash our hands or fruits and vegetables) For many people in the world – more than 780 million people – this is a fact of life. ELCA World Hunger is the ELCA's ministry with and among people who face hunger and poverty. Through this ministry, our church supports relief work like food pantries, advocacy for fair laws to protect people who are poor, education so we can learn more about hunger, and development work, like job training programs that help people feed themselves. ELCA World Hunger also supports a lot of projects around the world that help communities get access to clean, safe water.

What does water have to do with hunger? It might seem odd, but not having enough water and not having enough food are connected. If people don't have clean water, they can't grow food or give water to livestock. Without clean water, they can get sick, which means they can't work to provide for themselves and their families. And without easy access to clean water, children have to spend so much time walking to collect water for their families that they can't go to school. Listen to some of these numbers:

- 768 million people do not have access to improved drinking water sources.
- 40 billion hours are spent every year walking to collect water in Africa alone.
- 272 million school days are lost each year to diarrhea.
- Most of the world cannot take a hot shower, get clean water from a faucet or flush a toilet in their home.

ELCA World Hunger works with churches around the world to build wells, train local people to care for wells, install irrigation systems or dig irrigation canals, construct toilets, improve sanitation in villages and towns, and teach people how to purify their water so they can cook and drink with it. In the last 30 years, we have cut the rate of hunger worldwide in half, and our church believes we can end hunger if we work together. But ending hunger means walking with our neighbors down roads with a lot of other challenges, including access to clean water. Without water, we cannot live. Our gifts this summer will help provide life-giving water to communities in Africa, Latin America, Asia, and here in the United States. This week, we will hear more about some ways ELCA World Hunger is already accompanying our neighbors down the road toward the future God has promised, a future where everyone will be fed and no one will thirst.

### DEBRIEF

Here is a script you can follow to guide discussions as a group after the Walk for Water.

The sign at the end of the track reads:

You have completed a simulated water collecting journey and have walked about one-tenth of a mile. You would need to walk around this track 37 times to equal the distance an average woman in Sub-Saharan Africa would travel each day.

A full 5-gallon jug weighs 41.5 pounds and a 2.5-gallon jug weighs more than 20 pounds. Please carry your jug back to the starting area. Then you will debrief your track experience as a group.

#### **DISCUSSION QUESTIONS**

- 1) Which track did you follow? What was the role-playing experience like for you?
- 2) What were some of your thoughts during the clinic experience? What were you diagnosed with?
- 3) How accessible is clean water in your hometown? What changes would you have to make if you didn't have (or don't have) easy access to clean water?
- 4) How many jugs would you have to collect in order to perform your daily tasks and activities?
- 5) What aspect of this experience stands out to you the most?
- 6) What were some of the things that made access to water difficult?
- 7) What effects did access to clean water have on the people in the story you followed?

#### DEBRIEF (CONTINUED)

When people have to walk far distances to collect water, it is not only getting that water jug full that matters. We need water for daily living. But the stories you followed along the track show something more – how different aspects of life are affected if you have to travel to collect water. Each of these stories is based on true stories we hear from people in the work we support, including the story from the United States. If someone doesn't have reliable, easy access to clean water, chances are it also means that health is at risk, access to education and economic life is limited, and that person lives in an area sensitive to climate change. Providing access to clean water is not just about day-to-day survival, but a better, sustainable future for whole communities of people.

ELCA World Hunger supports water projects because many of the obstacles to clean water are also part of the causes of hunger. If people are sick, they can't work and they may have high medical costs. If an area is affected by climate change with things like droughts or flooding, they can't grow food easily. (California – 17,000 jobs lost because of the drought.) If they have to travel for water, they don't have time to go to school. This is particularly hard on women and girls, who are often the ones responsible for collecting water, a task that can take their time away from school and work.

Our church has been working with other churches to address some of these problems. We've helped support clinics and health care, like you saw on the track. And we've helped support the building of irrigation systems, latrines and improved sanitation facilities, and advocacy for policies that help people get access to clean water.

### STORIES FROM ELCA WORLD HUNGER

Here are two stories of projects supported by ELCA World Hunger that you can use to show some of the work our church is invited to be part of.

#### PORTERVILLE, CALIF.

When we think of water crises, it can be easy to miss the challenges many people in the United States face in having access to clean water for themselves and their families. For many of our neighbors in California, though, a lack of water is a daily reality.

Since 2011, California has been in a record-breaking drought that has left many families without reliable access to water, especially if they are used to getting their water from a well. When wells run dry, children and adults may not have the water they need to drink, bathe, wash vegetables and fruit, or cook. The drought has also made it difficult for many Californians to feed themselves and their families. Many farms cannot produce crops without rain or water for irrigation, so many adults who work in farming industries have had their hours cut or lost their jobs. According to some estimates, more than 17,000 jobs have been lost because there aren't enough crops to harvest.

In Porterville, many residents depend on these jobs for their livelihood. If they live outside of the city, they also depend on wells for water in their homes. With the drought, they face the two related challenges of loss of income and a lack of water in their homes. With support from an ELCA World Hunger grant, the Porterville Area Coordinating Committee is hard at work, helping families get the clean water they need for their households. When a well runs dry, a family can get a large container for their yard filled with water. The water is then pumped into their home so they can use it for drinking, cooking, and bathing. Each week, trucks come by to refill the tanks.

The coordinating committee is working hard to make sure that families – especially those with children – have enough water now. But we know that as long as the drought continues, the challenges will only get bigger for the people of Porterville and other California towns. Providing tanks and pumps to get water into homes and helping distribute bottled water to people on the weekends are important ways the coordinating committee is helping families in their community.

But ELCA World Hunger is involved in other ways, too. The Lutheran Office of Public Policy Office-California and other community advocates are raising their voices together to protect California's water supply – its rivers, reservoirs, lakes and groundwater – from pollution so that it can be preserved and used by people in need. We know that water is not just a need today but a need every day. Gifts to ELCA World Hunger make it possible for our church to accompany communities around the world and in Porterville to help us and our neighbors have clean water today, tomorrow, and long into the future.

#### **NICARAGUA**

The Latin American country of Nicaragua seems like it should have enough water for everyone. With an abundance of water on the ground and under the ground, the people of Nicaragua should have enough water for all of their needs – drinking, cooking, bathing and irrigating their farms. But this water depends on the seasons, and with a severe drought, families in Nicaragua can quickly lose access to fresh water.

In 2014, Nicaragua had the worst drought the country had seen in more than 40 years. Crops withered, wells dried up, and small farmers faced huge losses. People in rural areas were especially affected. In the area of Somotillo, most people depend on the rainy season to help water their crops and refill their wells. In a good year, with reliable rains and no drought, residents in Somotillo (especially women) must spend thirty minutes to one hour each day traveling to wells to get water for their families. During the dry season, when some wells dry up, they have to travel even farther.

The drought last year reduced crops in Somotillo by more than 70 percent, and most of the wells in the area ran dry. Even now, the people are still affected by the drought in 2014. Many are hopeful that the rainy season this year will start soon, so they can begin planting new crops. Others are fearful that another drought will harm them even more. Pastor Gerzan Alvarez of the Lutheran Church of Faith and Hope (ILFE), the Lutheran church in Nicaragua, put it starkly: "In this place, we're only able to survive."

With support from ELCA World Hunger and The Lutheran World Federation, the ILFE has worked in Somotillo with more than 150 families to find ways to reduce the effects of the 2014 drought and to help the community better prepare for future droughts. Together, the ILFE and families from Somotillo have worked on improving wells in the area, learning proper water usage and management, setting up irrigation systems, and planting yard gardens. Pastor Emperatriz Velasques of the ILFE says, "In this place, each day we're learning about nature's behavior, and we need to keep on working and teaching so we can grow our crops with the little water we have and keep home gardens with water from our wells. This way, we can provide food for the households."

Families in Nicaragua know how difficult it can be to depend so much on the climate and the seasons. In Somotillo, they are learning and working together to make sure that everyone in their community is prepared in case another drought strikes. At every step of the project led by the ILFE, family members are involved, learning together about climate, water use, gardening and irrigation and adopting new ways of farming to reduce the risk of drought. Still, though, the people of Somotillo depend greatly on the rain, and the water situation is difficult. Another drought will bring even more problems.

The ELCA has been invited to accompany the ILFE, our companion church, in the midst of these challenges and to support and to learn from the people of Somotillo and other communities about water and climate. Through ELCA World Hunger, our church is with our brothers and sisters in Nicaragua, as we walk together toward the future God has promised, when all will be fed and thirst will be no more (Revelation 7:16).

### PRAYERS FOR WATER

It's a great idea to conclude your time together in prayer. Here are some suggestions.

We give you thanks, O God, that through water and the Holy Spirit you give us new birth, cleanse us from sin, and raise us to eternal life. Stir up in your people the gift of your Holy Spirit: the spirit of wisdom and understanding, the spirit of counsel and might, the spirit of knowledge and the fear of the Lord, the spirit of joy in your presence, both now and forever. Amen *(ELW, p. 237)* 

Holy God, creator of light and giver of goodness, you voice moves over the waters. Immerse us in your grace, and transform us by your Spirit, that we may follow after your Son, Jesus Christ, our Savior and Lord, who lives and reigns with you and the Holy Spirit, one God, now and forever. Amen. (ELW, p. 22)

A prayer of Francis of Assisi: Blessed are you, Lord, through Sister Water, who is so useful, so humble, so precious, and so pure We praise and thank you, Lord, for your gift of water in all its many forms and uses. Guide us to use it wisely, to learn from its humility, to consume it mindfully and protect its purity, so that we may truly value water and share it generously. Amen.

(adapted from a prayer by Brother Cathal Duddy, www.praying-nature.com)

## **NEXT STEPS**

#### **LEARN MORE!**

ELCA World Hunger's Water and Hunger Toolkit is available for free at <u>www.ELCA.org/hunger/resources</u>. Just click on the "Toolkits" tab to find it and other toolkits filled with activities for every age and activity level.

Creation Justice Ministries has some great resources, including "Water, Holy Water," available for free at <u>www.creationjustice.org</u>. This organization provides education and advocacy on a variety of environmental issues, including water, land, energy and climate change.

#### **ADVOCATE!**

Learn more about water in your own community. Where does your water come from? Does everyone have equitable access to water? Look for news articles and reports about your local water and sanitation systems. You can also learn more from the Environmental Protection Agency at <a href="http://water.epa.gov/drink/local/">http://water.epa.gov/drink/local/</a>. If water is not readily available or affordable, speak up! Be a voice of change in your community.

ELCA Advocacy is the ELCA's witness at the state and national level on policies important to people of faith. Sign up for advocacy e-alerts, read the ELCA Advocacy blog and learn more about important issues right now, including the right to clean water, at <u>www.ELCA.org/advocacy</u>.

#### **GIVE!**

Your donations to ELCA World Hunger's Walk for Water support water projects in dozens of countries around the world. And for the remainder of 2015, all gifts – up to \$500,000 – will be matched by a generous family in the ELCA! Give online by visiting <u>www.ELCA.org/walk4water</u> or <u>www.ELCA.org/hunger/donate</u> (in 2016 and beyond). Or mail a check made out to ELCA World Hunger with "Walk for Water" in the memo line to:

ELCA P.O. Box 1809 Merrifield, VA 22116-8009

# TRACK STORY SIGNS

## ELCA WORLD HUNGER'S WALK-FOR-WATER

Imagine what it would be like if you had to walk miles to collect water. Your whole family relies on this water for drinking, cooking and cleaning. This track simulates different water collecting trips.

To begin, grab a water container. The color of your water container determines your journey. Look for your color on signs along the way to follow your story.

One loop around this track is onetenth of a mile, but most water collecting trips are much longer.

## WATER AND POLICY

You are a mother of two small children living in Flint, Mich. When you were growing up, the city was thriving, and local factories provided steady jobs with good pay. Now, the factories have closed, and people who could afford it, moved. Without jobs, the city is struggling.



A state-appointed financial manager has taken over Flint's finances. To save money, he orders the city to find a new water source a local polluted river. Despite complaints about the water, the state and the City Council insist that it is safe. You trust them, using the water for bathing, drinking and cooking.



News reports reveal the water in your city has corroded pipes and leached lead into the water. Your church passes out flyers about lead poisoning, and you realize that your son has the symptoms listed on the flyer. You feel angry and disappointed.



Your pipes at home test positive for lead; they will need to be replaced. Your insurance company won't replace them because of the cause of the problem. Worse still, most of the pipes in your neighborhood need to be replaced. You and your neighbors will be facing this crisis for a long time.



## WATER AND EDUCATION

You are a 15-year-old girl in Indonesia who has to walk 3.5 miles to the nearest clean water source. Although you love going to school, there are times when your family depends on you to get water for them. This can take up much of the time that you would otherwise spend in the classroom.



You left early in the morning before the sun was up to collect water. If all goes well you might be able to make it to at least part of the school day. So far you are making good time.



It is starting to get hot and you are getting a little dizzy. You decide to sit in the shade for a while, hoping the rest will pay off. Wait here for 2 minutes. While you are recovering from the dizziness, you begin to think of your friends at school and realize that you would be learning math at this point in the day if you did not need to gather water.



You stumble on a rock and hurt your ankle. **Drag one leg behind you** to simulate this injury. This slows you down considerably. Because you are walking more slowly, you probably will not make it to school today.



## WATER AND ECONOMY

You are a 22-year-old mother of two in Nepal. You travel almost 2 miles to fetch water, and you have to make the journey 4 times a day. As a result, you spend much of your day walking to and from the water source. There is not much time left in the day to earn money for your children to go to school or get proper medical attention.



## You use most of the money you earn from work to care for your family. Sometimes your income is inconsistent and there is not enough food to go around, so you must go without to ensure your kids are fed. You have not had enough to eat recently and you are not feeling well today. You have to walk a little slower and stop every now and then to catch your breath.



You are not feeling any better. You wish you could let your oldest daughter collect water, but you know it is important for her to be in school. Your family relies on you for all the domestic chores, but as the primary caregiver you still have to earn money. You are sad to realize that your slow pace today that you will not be as productive as you need to be.



Along the way someone tells you about a new water project that will make clean water more accessible to your community. This makes you glad because now you will not have to travel as far to collect water. As a result, you will be able to spend more time making and selling your products to earn money for your family.



## WATER AND HEALTH

You are a 9-year-old boy from the Central African Republic. You are not usually the one who collects water, but your mother and sisters are sick, so the task falls to you. You ride your bike 4 miles to the water source while your mother and sisters recover from their illnesses.



## You have heard that a lot of people drink bottled water in the city, but you live in a rural area and bottled water is rare and expensive. Water from the nearest pond is contaminated and your sisters are currently sick from a waterborne disease. You wonder if you will get sick, too, and have to miss school.

Your bike got a **flat tire.** Thankfully, you have a patch kit and a pump to fix the flat. Wait here for 2 minutes, about how long it takes to fix a tire. You can't help but think of your sisters at home sick, and you hope they will recover quickly with the clean water that you are gathering.



Someone offers you money to buy your bicycle. With this money you could buy some iodine tablets to purify the water or get medicine for your mother and sisters. You sell the bike, even though this adds time to your journey and you will not be able to make it to school today.



## WATER AND CLIMATE CHANGE

You are a 17-year-old boy from California. Your family lives just outside the city limits and relies on a drilled well for water for drinking, washing and irrigating your vegetable gardens. Changes in the climate in California have contributed to one of the driest years ever. Your well started to run dry a month ago, and now barely a trickle comes through the faucet. You have spent the last two Saturdays helping neighbors haul jugs of water from a pumping station to their homes.



The normal delivery of water to the pumping station has been delayed, so there is not enough water available for everyone. You run to fill up your jug, hoping you can get enough for the week.

You could only get one case of water – 24 bottles – for the four people in your family to share during the week. Desperate, you and your neighbors open a fire hydrant and start filling buckets and jugs with water. The police arrive and write your parents a ticket. Wait here for 2 minutes while your parents go to court to get the ticket dismissed.



The owners of the large farm that you and your parents work on have cut your hours because there are no crops to harvest. This has made it hard to afford food, water, rent and other expenses. The ticket cost them \$100. Now, you cannot afford the gas this week to get bottled water at the distribution site.

# FACTOID SIGNS

Lead poisoning can affect every system of the body. In children, it can decrease bone and muscle development, damage the kidneys, and cause developmental delays in speech and language.



More than a year before government officials switched the water source for Flint residents. General Motors disconnected its factories from the Flint River because the water was corroding new car parts.



#### City and state officials could have **prevented the pipes in Flint from corroding** and spreading lead by treating the water with chemicals. The cost would have been \$100 per day for the whole city.



Children spend millions of hours each year fetching water, a task that takes their time from other activities or prohibits them from attending school.



Nearly **70 percent** of the world's 130 million out-of-school children are girls.



Among 13-to 24-year-old girls and women in the developing world, 33 percent said household chores were the main reason they were not in school.

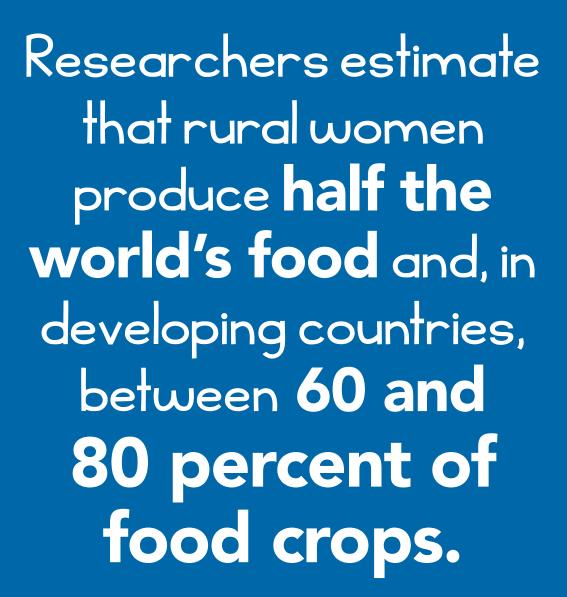


Women and girls spend 40 billion hours a year fetching water. This chore takes their time away from other important activities such as participating in the economy, caring for family members and relaxation.



### When women and girls earn income, they **reinvest 90 percent** of it into their families, whereas men reinvest only 30 to 40 percent.







### **783 million people** in the world do not have access to safe water. This is roughly 11 percent of the world's population.



Globally, diarrhea kills more children than malaria, measles and AIDS combined.

88 percent of deaths related to diarrheal disease are due to a lack of access to sanitation facilities, inadequate water supply for hygiene and unsafe drinking water.



2.5 billion people (35 percent of the world's population), including almost 1 billion children. live without basic sanitation. Every 20 seconds, a child dies as a result of poor sanitation. That's 1.5 million preventable deaths each year.



#### If current greenhouse gas emissions remain the same, the United States and other countries will face increasingly dry conditions, unlike anything we have seen in modern times.



Between 1970 and 2010, the world's population increased by 87 percent (from 3.7 billion to 6.9 billion). During the same period, the annual average population exposed to floods increased by 112 percent (from 33.3 to 70.4 million per year).



As water becomes scarcer and water systems more expensive to manage, many cities and regions are handing control of water over to private companies. When this happens, water rates increase by 18 percent on average each year, making it more difficult for households to afford water for drinking, cooking and cleaning.



As much as **10 percent** of people in developing countries are infected with intestinal worms.

### In 2013 there were **198 million cases of malaria** and **584,000 deaths** from the disease.

### Each year diarrhea kills about 760,000 children under 5 years old.

## OBSTACLE SIGNS

You have completed a simulated water collecting journey and have walked about one-tenth of a mile. You would need to walk around this track 37 times to equal the distance an average woman in sub-Saharan Africa would travel each day.

A full 5 gallon jug weighs 41.5 pounds and a 2.5 gallon jug weighs more than 20 pounds. Please carry your jug back to the starting area. Then you will debrief your track experience as a group.

# 



Heavy rains after a long drought brought flood conditions to your area. While the rain might seem like a blessing when you need water, floodwaters can often spread contamination throughout a water system. In urban areas, floods can overwhelm sewage systems and cause clean water sources to become unsafe. Water-borne illnesses are common throughout the world, especially in developing countries that lack improved sanitation and access to clean water. Even in the United States, contaminated floodwaters can be very dangerous. After you pass through the flood and rain, check in at the clinic to be sure you're healthy enough to keep going.

# A BUMP IN THE ROAD



So far the journey has been flat. But in reality not all paths to water sources are flat. **Sometimes people must negotiate hills or steep trails, or other obstacles that make the journey harder.** As you walk this gentle incline, imagine how steep, rocky or sandy terrain or urban obstacles like busy intersections or construction might impact your journey. How much more difficult would it have been if you did not have smooth sidewalks or reliable routes to guide you the entire way?

# 



In the developing world, women and girls can spend hours traveling under a hot sun to get water. In the United States, traveling to water distribution sites or working outside in the heat without adequate water can be dangerous. No matter how hot it gets, people still need water.

See what it is like to spend just 1 minute in the heat and bright sunlight at this station. If you are brave, see if you can last 5 minutes. Imagine what it would be like to walk in heat like this for miles, still carrying your water.

## CLINIC SIGNS

## LEAD POISONING:

#### Oh-no!

#### The water you drank after your long walk was contaminated by lead.

Every water system in the United States has at least a small amount of lead in it, but this is usually too little to do damage. In cities like Flint, Mich., though, too much lead in the water can cause permanent damage to your body. Lead starts in the bloodstream, but it can quickly travel to your brain, kidneys, liver, heart and other systems.

SPEND 2 MINUTES HERE LEARNING ABOUT THE HEALTHY FOODS THAT MAY HELP REDUCE THE EFFECTS OF LEAD POISONING AND STUDYING FROM THE EXTRA SCHOOLBOOKS YOU WILL NEED IF YOU ARE A STUDENT AFFECTED BY LEAD.

- Some homes in Flint, Mich., tested as high as 100 times what the Environmental Protection Agency considers a "safe" level of lead in the water.
- In children, lead can slow down development and cause hearing and vision problems that don't go away.
- A recent study found that lead can contribute to lower reading and math scores for children.

# DIARRHEA:

#### Uh-oh!

#### Looks like the water you just passed through is now really making everything pass through you!

Even though water may look clean and harmless, it can be unsafe to drink or to use for cooking and bathing. "Diarrhea" often refers to a number of diarrheal diseases, including cholera. Thankfully, most cases of diarrhea can be treated with rehydration and antibiotics. Take a seat on the latrine and rehydrate. This clinic is stocked with clean water for you to drink as you recover.

- Each year diarrhea kills about 760,000 children under 5 years old.
- Only **4** in **10** children with diarrhea are given the recommended treatment of oral rehydration therapy and continued feeding.
- A significant number of diarrheal disease cases **can be prevented through safe drinking water and adequate sanitation and hygiene**, such as hand-washing with soap.

# MALARIA

#### You've been bitten!

Stagnant water, such as floodwaters, are prime breeding ground for mosquitoes. You have a headache and are running a fever, which is diagnosed as malaria. These symptoms typically appear about 10 to 15 days after being bitten by a mosquito carrying the malaria parasite. About half the world's population is at risk for malaria, but the disease is preventable and treatable. This clinic is stocked with antimalarial medicine. After taking the medicine you're still fatigued from the illness. Lie down on a cot to recover.

#### YOUR JOURNEY IS DELAYED BY 2 MINUTES.

- Malaria mortality rates have fallen by **47 percent** since 2000.
- In 2013 there were **198 million cases of malaria** and **584,000 deaths** from the disease.
- Sleeping under **long-lasting, insecticide-treated mosquito nets** protects people from the mosquitoes that carry malaria. The nets are effective for three to five years, depending on the model and conditions of use.

# WORMS

#### It can be hard to tell if something is safe to eat or drink.

But with a flood, unsafe water can make vegetables, fruit and soil downright dangerous. After eating a mango without rinsing it first, you are diagnosed with ascariasis, an infection caused by intestinal worms. These worms can grow to more than 11 inches and cause abdominal discomfort. They can also impair growth in children. With medicine, though, the infection can be treated.

#### SPEND 2 MINUTES IN THE CLINIC LEARNING HOW TO SPOT CLEAN WATER AND HOW TO PRACTICE GOOD SANITATION BEFORE MOVING ON.

- While ascariasis is found all over the world, people in countries without adequate sanitation are **especially at risk.**
- As much as **10 percent** of the people in developing countries are infected with intestinal worms.
- Severe ascariasis infections cause **about 60,000 deaths each year,** most of them children.
- Worms can be prevented by **washing your hands** and **cleaning food like fruits and vegetables.**