

Toxic Waste

Description of a Team Building Exercise

Toxic Waste

- This is a popular, engaging small group initiative activity which always "works", providing a rich teamwork challenge for about 30-45 minutes. Involves thinking, imagination, action, fantasy, risk and an attractive solution.
- Can be done with adolescents or adults.
- The challenge is to move the toxic waste contents to the neutralization container using minimal equipment and maintaining a safe distance within a time limit.
- Moderately difficult - avoid using with groups who are still in the early stages of [group development](#). Works best towards the end of a program and/or after the group has come together and dealt with basic teamwork issues.
- Can be done indoors or outdoors; outdoors is more dramatic because water can be used as the "toxic waste" instead of balls.



DANGER
Toxic
hazard

Set-Up

- Use the rope to create a circle at least 8 ft in diameter on the ground to represent the toxic waste radiation zone. The larger the radiation zone, the more difficult the activity.
- Place the small bucket in the center of the radiation zone and fill it with water or balls to represent the toxic waste.
- Place the neutralization bucket approximately 30 to 50 feet away. The greater the distance, the more difficult the activity.
- Put all other equipment (i.e., bungee, cords, and red herring objects (optional)) in a pile near the rope circle.

Directions

- The challenge is for the group to work out how to transfer the toxic waste from the small bucket into the large bucket where it will be "neutralized", using only the equipment provided and within a time frame. The waste will blow up and destroy the world after 20 minutes if it is not neutralized.
- Anyone who ventures into the radiation zone will suffer injury and possibly even death, and spillage will create partial death and destruction. Therefore, the group should aim to save the world and do so without injury to any group members.

Equipment

- [1 Toxic Waste kit with with activity guide & facilitation notes](#)
- Blindfolds (optional)
- Red herring objects (optional)

Summary

Equipped with a bungee cord and rope, a group must work out how to transport a bucket of "Toxic Waste" and tip it into the neutralization bucket. Toxic Waste can be used to highlight almost any aspect of teamwork or leadership.

Time

Total time ~30-50 minutes, consisting of:
~5 minute briefing
~5 minutes group planning time, no action
~15-30 minutes of active problem-solving
~10 minutes discussion/debrief

Group Size

- Group sizes of approximately 7 to 9 are ideal, but the activity can be done with as few as 4 or as many as 12.

Processing Ideas

- There are invariably plenty of key communications and decisions during the exercise that provide for fruitful debriefing.
- The exercise will tend to naturally expose processes and issues related to many aspects of teamwork, including cooperation, communication, trust, empowerment, risk-taking, support, problem-solving, decision-making, and leadership.
- Can be videoed for subsequent analysis and debriefing.
- How successful was the group? e.g. consider:
 - How long did it take?
 - Was there any spillage?
 - Were there any injuries? (Often in the euphoria of finishing participants will overlook their errors and seem unconcerned about injuries and deaths caused by carelessness along the way.)

- The rope circle represents the radiation zone emanating from the toxic waste in the bucket. Emphasize that everyone must maintain a distance (circle radius) from the toxic waste wherever it goes, otherwise they will suffer severe injury, such as loss of a limb or even death.
- Give the group some planning time with no action e.g. 5 mins, then start the clock and indicate its time for action, e.g., 15 or 20 mins.

Facilitator Notes

- Toxic Waste is not an easy exercise and most groups will benefit from some coaching along the way.
- The solution involves attaching the cords to the bungee loop, then guiding the bungee with the strings to sit around and grab the toxic waste bucket. Then with everyone pulling on their cord and with good coordination and care, the toxic waste bucket can be lifted, moved and tipped into the empty neutralizing bucket.
- If someone breaches the toxic waste zone, indicated by the circle, enforce an appropriate penalty e.g., loss of limbs (hand behind back) or function (e.g., blindfolds if a head enters the zone) that lasts for the rest of the game. If a whole person enters the zone, they die and must then sit out for the rest of the activity.
- If the group struggles to work out what to do, freeze the action and help them discuss.
- If the group spills the waste entirely, make a big deal about catastrophic failure (everyone dies), invite them to discuss what went wrong and how they can do better, then refill the container and let them have another go.
- Ideas for varying the level difficulty of the activity:
 - Adjust timeframe
 - Adjust distance between the buckets
 - Include obstacles between the buckets
 - Include red herring objects in available equipment.

Make sure there is an objective evaluation of performance - it is rarely 'perfect'.)

- How well did the group cope with this challenge? (e.g., out of 10?)
- What was the initial reaction of the group?
- What skills did it take for the group to be successful?
- What would an outside observer have seen as the strengths and weaknesses of the group?
- How did the group come up with its best ideas?
- What did each group member learn about him/herself as a group member?

What lessons did the group learn from this exercise which could be applied to future situations?