

Exposure Pathways



What is Exposure?

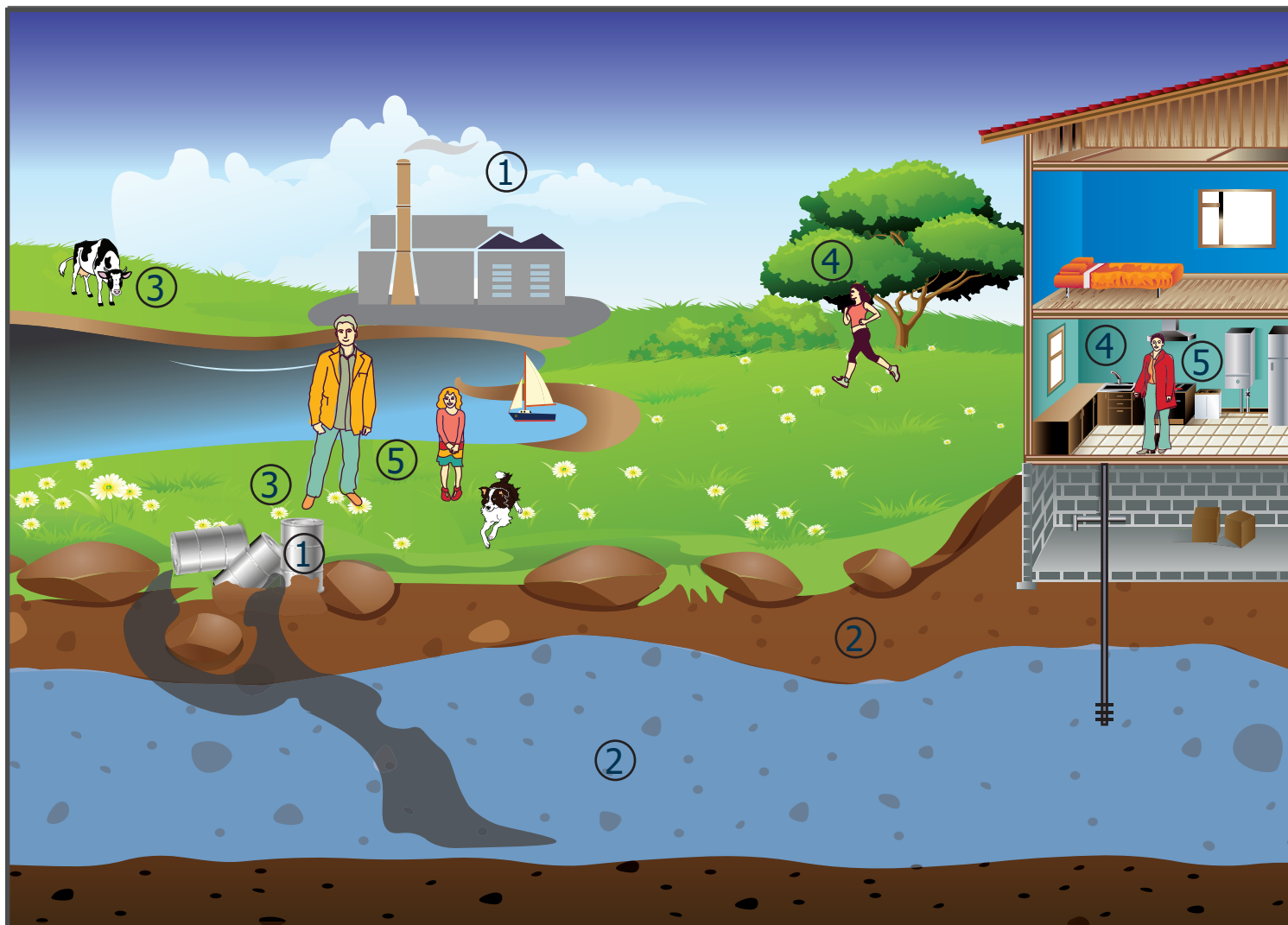
Exposure is when you come in contact with a material and that material enters your body.



What is an Exposure Pathway?

An exposure pathway is the course along which a material in the environment moves from its source and into your body.





5 Elements of a Complete Exposure Pathway

1	2	3	4	5
Source	Media	Exposure Point	Exposure Route	Receptor/ Population
<p>How the material gets in the environment</p> <ul style="list-style-type: none"> » Landfill » Tank » Pond » Creek » Incinerator » Drum » Factory 	<p>How a material moves from its source to the point of exposure</p> <ul style="list-style-type: none"> » Soil » Sediment » Animals/Plants » Groundwater » Surface Water » Air 	<p>Where people contact the media</p> <ul style="list-style-type: none"> » Residence » Business » Residential Yard » Playground » Campground » Waterway 	<p>How the material enters the body</p> <ul style="list-style-type: none"> » Breathing air that contains the material » Eating or drinking something with the material in it » Getting it on your skin or touching something that has the material in it or on it 	<p>People who are exposed or potentially exposed</p> <ul style="list-style-type: none"> » Residents » Hunters/Fishermen » Recreational populations » Visitors » Workers



What is a Completed Pathway?

A pathway of exposure is considered completed when all five elements are present. A completed pathway connects the source of the material to people.

An exposure pathway is the way in which a person may come in contact with a material.

Why is a Completed Pathway of Exposure Important?

A pathway must be completed for exposure to occur. All five elements must be present. If one element is missing the pathway is incomplete and there is no exposure.

Will Exposure from a Completed Pathway Affect My Health?

Whether or not a person experiences health effects from exposure to materials in the environment depends on a combination of several site-specific factors including:

- » Kind of material released
- » Amount of material available at the exposure point
- » Physical and chemical form of the material
- » Environmental conditions
- » Length of exposure time

A Completed Pathway will result in exposure and possible health effects and further evaluation. An Incomplete Pathway results in no exposure and no health effects and does not require further evaluation.



Site-specific information about completed exposure pathways is used in both Risk Assessments and Public Health Assessments to determine if a site is safe for humans and/or the plants or animals found on the site.





NAVY AND MARINE CORPS FORCE HEALTH PROTECTION COMMAND

IMPROVING READINESS THROUGH PUBLIC HEALTH ACTION

NMCFHPC Exposure Pathways Fact Sheet

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<https://www.med.navy.mil/Navy-and-Marine-Corps-Force-Health-Protection-Command/Environmental-Health/Environmental-Programs/Risk-Communication/>

