

## Exposure Scenarios for Forest Service Risk Assessments

This list represents the exposure scenarios used in most Forest Service Risk Assessments for the herbicides used in Region 6. Older risk assessments may have slightly different, or fewer scenarios, as may risk assessments for different pesticides. Basic descriptions of the scenarios used are found in "Preparation of Environmental Documentation and Risk Assessments for the USDA Forest Service" (SERA 2007). Specific and quantitative details for each exposure are found in the Exposure Assessment section of each Risk Assessment, and its associated worksheets, or worksheets generated for the project.

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### Human Health Exposure Scenarios

Worksheet Page #	Scenario Description
C01a	Worker exposure estimates for Backpack Worker based on the amount of material handled per day
C01b	Worker exposure estimates for Ground Spray Worker based on the amount of material handled per day
C01c	Worker exposure estimates for Aerial Spray Worker based on the amount of material handled per day
C02a	Accidental Dermal Exposure Assessment Using Zero-Order Absorption, Worker, Surface Area, Hands, for 1 minute(s)
C02b	Accidental Dermal Exposure Assessment Using Zero-Order Absorption, Worker, Surface Area, Hands, for 60 minute(s)
C03a	Accidental Dermal Exposure Assessment Using First-Order Absorption, Worker, Surface Area, Hands, for 60 minute(s)
C03b	Accidental Dermal Exposure Assessment Using First-Order Absorption, Worker, Surface Area, Lower legs, for 60 minute(s)
D01a	Accidental Dermal Exposure Assessment Using First-Order Absorption, Child, Surface Area, Whole body, for 60 minute(s)
D01b	Accidental Dermal Exposure Assessment Using First-Order Absorption, Adult Female, Surface Area, Feet and lower Legs, for 60 minute(s)
D02	Dermal Contact with Contaminated Vegetation, Adult Female, Surface Area, Wearing shorts and T-shirt, for 1 minute(s)
D03a	Consumption of Contaminated Fruit by a Adult Female, acute exposure after a single application
D03b	Consumption of Contaminated Vegetation by a Adult Female, acute exposure after a single application
D04a	Consumption of Contaminated Fruit, Adult Female, chronic exposure scenario after a single application
D04b	Consumption of Contaminated Vegetation, Adult Female, chronic exposure scenario after a single application
D05	Acute exposure of Child after an accidental spill of the pesticide into a pond
D06	Consumption of contaminated water, Child, acute exposure
D07	Consumption of contaminated water, Adult Male, chronic exposure
D08a	Acute scenario for the consumption of contaminated fish by Adult Male after an accidental spill of the pesticide into a pond
D08b	Acute scenario for the consumption of contaminated fish by Subsistence Populations after an accidental spill of the pesticide into a pond
D09a	Consumption of contaminated fish, Adult Male, chronic exposure
D09b	Consumption of contaminated fish, Subsistence Populations, chronic exposure

D10a	Concentration in pond water after direct spray or after drift from Aerial application at distances downwind in feet from the application site
D10b	Concentration in stream water after direct spray or after drift from Aerial application at distances downwind in feet from the application site
D11	Swimming Exposure Assessment Using Zero-Order Absorption, Adult Female, Surface Area, Whole body, for 60 minute(s)

## Ecological Exposure Scenarios

Worksheet Page #	Scenario Description
F01	Direct spray of Small Mammal assuming first-order absorption kinetics with spray of 0.5 of the body surface
F02a	Direct spray of Small Mammal assuming 100% absorption with spray of 0.5 of the body surface
F02b	Direct spray of Honey bee assuming 100% absorption with spray of 0.5 of the body surface
F03a	Consumption of Contaminated Fruit, Small Mammal, acute exposure scenario after a single application
F03b	Consumption of Contaminated Vegetation, Small Mammal, acute exposure scenario after a single application
F04a	Consumption of Contaminated Fruit, Small Mammal, chronic exposure scenario after a single application
F04b	Consumption of Contaminated Fruit, Small Mammal, chronic exposure scenario after a single application
F05	Acute exposure of Small Mammal after an accidental spill of 200 gallons of the pesticide into a 1000 m <sup>3</sup> pond
F06	Consumption of contaminated water, Small Mammal, acute exposure
F07	Consumption of contaminated water, Small Mammal, chronic exposure
F08	Acute scenario for the consumption of contaminated fish by Fish-eating bird after an accidental spill of 200 gallons of the pesticide into a 1000 m <sup>3</sup> pond
F09	Consumption of contaminated fish, Fish-eating bird, chronic exposure
F10	Consumption of Contaminated Vegetation, Large Mammal, acute exposure scenario after a single application
F11a	Consumption of Contaminated Vegetation, Large Mammal, chronic exposure scenario after a single application
F11b	Consumption of Contaminated Vegetation, Large Mammal, chronic exposure scenario after a single application
F12	Consumption of Contaminated Short Grass, Large Bird, acute exposure scenario after a single application
F13a	Consumption of Contaminated Short Grass, Large Bird, chronic exposure scenario after a single application
F13b	Consumption of Contaminated Short Grass, Large Bird, chronic exposure scenario after a single application
F14a	Consumption of Contaminated Insects, Small Mammal, acute exposure scenario
F14b	Consumption of Contaminated Insects, Small Bird, acute exposure scenario
F15	Potential exposure of non-target plants through the use of contaminated irrigation water based on estimates concentrations in ambient water.
F16a	Consumption of Small Mammal by Carnivorous mammal, acute exposure scenario
F16b	Consumption of Small Mammal by Carnivorous bird, acute exposure scenario