

3.3 Configure Human Exposure

Figure 17 shows the HUMAN EXPOSURE tab. The Tool estimates risk for two human receptors: an adult farmer and a farm child; these cannot be changed. The Tool includes 15 exposure pathways for LAUs and 3 for surface disposal units. For LAUs, some are applicable to all scenarios (crop, pasture, reclamation), and others are applicable only to particular scenarios. For convenience, the pathways are grouped into Pathways for All Scenarios, Additional Pathways for Crop Scenario, and Additional Pathways for Pasture/Reclamation Scenarios. The HUMAN EXPOSURE tab shows (and allows you to select) all pathways regardless of what scenario(s) you have chosen on the SCENARIOS tab; however, you will only get results for pathways that are applicable to the scenario(s) you have selected.

For surface disposal, the Tool runs only air, groundwater, and shower (unless one or more is deselected here).

The screenshot shows the 'Human Exposure' tab selected in a software interface. The tab bar at the top includes 'Scenarios', 'Chemicals', 'Human Exposure', 'Ecological Exposure', and 'Inputs'. The main content area is titled 'Human Receptors' and includes a note: 'Exposures to both an adult farmer and a child of a farmer are estimated for the pathways selected.' Below this is the 'Human Pathways' section, which instructs users to 'Select pathways to include in the simulation for each type of scenario using the checkboxes below.' The pathways are organized into three groups:

- Pathways for All Scenarios:** Air, Shower, Soil, Groundwater, Surface Water, Fish (all checked).
- Additional Pathways, Crop Scenarios (Tilled, Untilled):** Protected Vegetables, Protected Fruit, Exposed Vegetables, Exposed Fruit, Root Vegetables (all checked).
- Additional Pathways, Pasture/Reclamation Scenarios:** Beef, Milk (both checked).

Figure 17. HUMAN EXPOSURE tab: Select one or more pathways to run.

In addition to the pathways shown in Figure 17, the Tool also calculates a total ingestion risk for each LAU scenario that sums the risks from all ingestion pathways selected that are applicable to the scenario (thus, it will vary depending on what pathways are selected, even if everything else stays the same). The total ingestion risk is based on groundwater as the source for drinking water and does not include risks from surface water ingestion, even if the groundwater pathway has not been selected and is thus not included in total ingestion. See **Appendix A** for more details. We strongly advise running all pathways, especially if you are interested in total ingestion risk; this does not impact run time.