

uses. In calculating a DWLOC, the Agency determines how much of the acceptable exposure (i.e., the PAD) is available for exposure through drinking water e.g., allowable chronic water exposure (mg/kg/day) = cPAD - (average food + residential exposure). This allowable exposure through drinking water is used to calculate a DWLOC.

A DWLOC will vary depending on the toxic endpoint, drinking water consumption, and body weights. Default body weights and consumption values as used by the USEPA Office of Water are used to calculate DWLOCs: 2 liter (L)/70 kg (adult male), 2L/60 kg (adult female), and 1L/10 kg (child). Default body weights and drinking water consumption values vary on an individual basis. This variation will be taken into account in more refined screening-level and quantitative

drinking water exposure assessments. Different populations will have different DWLOCs. Generally, a DWLOC is calculated for each type of risk assessment used: Acute, short-term, intermediate-term, chronic, and cancer.

When EECs for surface water and ground water are less than the calculated DWLOCs, OPP concludes with reasonable certainty that exposures to the pesticide in drinking water (when considered along with other sources of exposure for which OPP has reliable data) would not result in unacceptable levels of aggregate human health risk at this time. Because OPP considers the aggregate risk resulting from multiple exposure pathways associated with a pesticide's uses, levels of comparison in drinking water may vary as those uses change. If new uses are added in the future, OPP will reassess the potential

impacts of residues of the pesticide in drinking water as a part of the aggregate risk assessment process.

1. *Acute risk.* Using the exposure assumptions discussed in this unit for acute exposure, the acute dietary exposure from food to acetamiprid will occupy 17% of the aPAD for the U.S. population, 11% of the aPAD for females 13 years and older, 38% of the aPAD for infants less than 1 year of age and 40% of the aPAD for children 1 to 6 years of age. In addition, there is potential for acute dietary exposure to acetamiprid in drinking water. After calculating DWLOCs and comparing them to the EECs for surface and ground water, EPA does not expect the aggregate exposure to exceed 100% of the aPAD, as shown in the following Table 3 of this unit:

TABLE 3.—AGGREGATE RISK ASSESSMENT FOR ACUTE EXPOSURE TO ACETAMIPRID

Population Subgroup	aPAD (mg/kg)	% aPAD (Food)	Surface Water EEC (ppb)	Ground Water EEC (ppb)	Acute DWLOC (ppb)
U.S. population	0.10	17	17	0.0008	2,900
All Infants (< 1 year)	0.10	38	17	0.0008	620
Children 1 to 6 years	0.10	40	17	0.0008	600
Females 13 to 50 years	0.10	11	17	0.0008	2,700

2. *Chronic risk.* Using the exposure assumptions described in this unit for chronic exposure, EPA has concluded that exposure to acetamiprid from food will utilize 8% of the cPAD for the U.S. population, 15% of the cPAD for infants less than 1 year of age and 21% of the

cPAD for children 1 to 6 years of age. Based upon the use pattern, chronic residential exposure to residues of acetamiprid is not expected. In addition, there is potential for chronic dietary exposure to acetamiprid in drinking water. After calculating DWLOCs and

comparing them to the EECs for surface and ground water, EPA does not expect the aggregate exposure to exceed 100% of the cPAD, as shown in the following Table 4 of this unit:

TABLE 4.—AGGREGATE RISK ASSESSMENT FOR CHRONIC (NON-CANCER) EXPOSURE TO ACETAMIPRID

Population Subgroup	cPAD mg/kg/day	%cPAD (Food)	Surface Water EEC (ppb)	Ground Water EEC (ppb)	Chronic DWLOC (ppb)
U.S. population	0.07	8	4	0.0008	2,260
All infants (< 1 year)	0.07	15	4	0.0008	600
Children 1 to 6 years	0.07	21	4	0.0008	550

3. *Short- and intermediate-term risk.* Short- and intermediate-term aggregate exposure takes into account residential exposure plus chronic exposure to food and water (considered to be a background exposure level).

Acetamiprid is currently registered for use that could result in short- and intermediate-term residential exposure and the Agency has determined that it is appropriate to aggregate chronic food

and water and short- and intermediate-term exposures for acetamiprid.

Using the exposure assumptions described in this unit for short- and intermediate-term exposures, EPA has concluded that food and residential exposures aggregated result in aggregate MOEs of 18,000 for U.S. population and 23,000 for children 7 to 12 years of age. These aggregate MOEs do not exceed the Agency's level of concern for aggregate exposure to food and residential uses. In

addition, short- and intermediate-term DWLOCs were calculated and compared to the EECs for chronic exposure of acetamiprid in ground and surface water. After calculating DWLOCs and comparing them to the EECs for surface and ground water, EPA does not expect short- and intermediate-term aggregate exposure to exceed the Agency's level of concern, as shown in the following Table 5 of this unit: