Glossary

BMD_{10} is a Benchmark Dose associated with a 10% response adjusted for background.

Benchmark Response (BMR) is a designated level or percent of response relative to the control level of response used in calculating a BMD

Common Mechanism of Toxicity pertains to two or more pesticide chemicals or other substances that cause a common toxic effect(s) by the same, or essentially the same, sequence of major biochemical events (i.e., interpreted as mode of action).

Comparative effect level (CEL) is a dose by which potency of chemicals may be compared; *e.g.* the dose causing a maximum of 15% cholinesterase inhibition.

Cumulative Assessment Group (CAG) is a subset of chemicals selected from a common mechanism group for inclusion in a refined quantitative estimate of risk.

Cumulative risk is the risk of a common toxic effect associated with concurrent exposure by all relevant pathways and routes of exposure to a group of chemicals that share a common mechanism of toxicity.

Dose additivity is the Agency's assumption when evaluating the joint risk of chemicals that are toxicologically similar and act at the same target site. In other words, it is assumed that each chemical behaves as a concentration or dilution of every other chemical in the CAG (or chemical mixture). The response of the combination is the response expected from the equivalent dose of an index chemical. The equivalent dose is the sum of the component doses, scaled by each chemical's toxic potency relative to the index chemical.

Index chemical is a chemical used as the point of reference for standardizing the common toxicity of the chemical members of the CAG.

Lowest-Observed-Adverse-Effect Level (LOAEL) is the lowest dose in a toxicity study resulting in adverse health effects

No-Observed-Adverse-Effect Level (NOAEL) is the highest dose in a toxicity study which does not result in adverse health effects

OPCumRisk is a computer program developed at ORD's NHEERL to determine relative potency estimates and PoDs for the index chemical.

Pathway of Exposure is the physical course a pesticide takes from the source to the organism exposed (e.g., through food or drinking water consumption or residential pesticide uses).

Point of Departure (PoD) is a dose that can be considered to be in the range of observed responses, without significant extrapolation. A PoD can be a data point or an estimated point that is derived from observed dose-response data. A PoD is used to mark the beginning of extrapolation to determine risk associated with lower environmentally relevant human exposures.

Relative Potency Factor (RPF) is the ratio of the toxic potency of a given chemical to that of an index chemical in the CAG. Relative potency factors are used to convert exposures of all chemicals in the CAG into their exposure equivalents of the index chemical.

Route of Exposure is the way a chemical enters an organism after contact (e.g., ingestion, inhalation, or dermal absorption).

Steady state inhibition is the time point at which continued dosing at the same level results in no further increase in cholinesterase inhibition.

Acronyms

A	Estimate of A (background cholinesterase activity)
AChE	Acetylcholinesterase
B	Estimate of B (horizontal-asympote from July 2001 analysis)
B/A	Ratio of estimate of B/estimate of A
BMD_{10}	A Benchmark Dose associated with a 10% response adjusted for background
BMDL	Lower 95% confidence limit on the BMD_{10}
BMR	Benchmark Response -a designated level or percent of response relative to the control level of response used in calculating a BMD
CEL	Comparative effect level - Dose level used to compare potencies
ChEI	Cholinesterase inhibition
CL	Confidence limit
CNS	Central nervous system
D	Displacement parameter in expanded model
DER	Data evaluation record, a review of a toxicity study
F	Female
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FQPA	Food Quality Protection Act
GOF	Model goodness-of-fit
HED	Health Effects Division
idose	Scaled internal dose
m	Estimate of absolute potency for a single cholinesterase measurement in the July 2001 analysis
*l*A	Log of background cholinesterase activity
*l*m	Log slope-scale factor
M	Male
MOE	Margin of exposure
MRID #	Study identification number
NA	Not available
NERL	National Exposure Research Laboratory
NHEERL	National Health and Environmental Effects Laboratory
nlme	Non-linear mixed effects model
NOAEL	No-Observed-Adverse-Effect Level - the highest dose in a toxicity study which does not result in adverse health effects
OP	Organophosphorous pesticide
OPCumRisk	Computer program developed at ORD's NHEERL to determine relative potency estimates and PoDs for the index chemical.
OPP	Office of Pesticide Programs
OPPTS	Office of Prevention, Pesticides, and Toxic Substances
ORD	Office of Research and Development
P_B	Limiting value of minimum cholinesterase activity (horizontal asymptote)
P_{BF}	Female specific value of P_B
P_{BM}	Male specific value of P_B
PBPK	Physiologically Based Pharmacokinetics
POD	Point of Departure

PNS	Peripheral nervous system
RBC	Red blood cells
RfD	Reference Dose - A dose not expected to cause adverse health effects in humans
RPF	Relative Potency Factor
S	Shape
SAP	Scientific Advisory Panel
*t*B	Transformed horizontal asymptote