



3/6/15 Plenary General Remarks

Group I. Exposure Assessment.

Exposure assessment yes/no.

Few to individual pesticides

Questionnaires

Except for the Ag. Health Study.

Used most: glyphosate

low production for many

banned: malathion

Group II. Epidemiology

Ag. Health Study, 2 case-control

Midwest

Canadian

Exposure Assessments

TCVP - inadequate for carcinogenicity

Parathion - excess risk for melanoma - limited
~~also~~ others inadequate

Malathion - limited

Diazinon - more evidence for cancer
 limited NHL, leukemia, lung

Glyphosate - limited NHL
 inadequate MM

Group III - Animal studies

Early - mid '70s Animal bioassay

Limited # of animals

Number of limited ~~factor~~

All studies were considered adequate

FOAs - EPA documents - studies submitted
for registration purposes to EPA from Ag. comp

TCVP - \uparrow liver tumors mice } sufficient
 \uparrow Renal carcinoma }

A switch from limited \rightarrow sufficient

Group IV

10 key charac. of agents that cause cancer

TCVP genotoxic - moderate

Group I

Parathion

Group II

Parathion - Epi. not a lot in humans

Originally: Group III

→ Lung cancer

Prostate ← some signals
OR 1.5

Group III

Parathion

Sufficient evidence for animal carcinogenicity

micel adenoma
lymphoma

Rats adrenal
Mamm.
Pancreatic

Group IV

Parathion,

Group I

Malathion - exposure

Group II

Malathion - prostate, NHL

Group III

malathion - mouse liver (M, F) ↑
rat liver
rat mammary

} Sufficient in animals

FOIA - Malathion

MAL/DZN/GLY

→ mechanisms operable in humans ←

Group IV

Malathion Mechanism Upgrade.

Group I

Diazinon

Group II

Diazinon - NHL

Lung cancer

Limited.

Group III

Diazinon

1 study
NTP

Mouse - Hcc

Rat - leukemias

Inadequate evidence
in animals

Group IV

Group I

Glyphosate - detectable in water & food.

Group II

Glyphosate negative NHL

Case-control glyph. → NHL

AHS negative data.

Group III

Glyphosate - limited to inadequate.

Group IV

Glyphosa