

Paraquat Dichloride: 2016 Human Health Mitigation

THE PESTICIDE STEWARDSHIP ALLIANCE CONFERENCE

FEBRUARY 6, 2019

Use Restrictions and Toxicity Concerns

Classified as restricted use due to high toxicity

An estimated 1.5 teaspoon can be lethal and there is no antidote

- In the late 80's "safening" agents were added
- 1997 RED noted that the safening agents had been associated with a decline in the number of incidents

Human incidents indicate that paraquat is highly corrosive to skin

Timeline

Registration Review Docket – Opened December 2011

Registration Review Final Work Plan – Published June 2012

Letters from the public re ingestion incidents – Received 2013

- June 2013 letter from Dr. Geller with CA Poison Control Centers
- October 2013 letter from the American Association of Poison Control Centers

Paraquat Dichloride Ingestion Risk Message – Issued December 2014

- <https://www.epa.gov/pesticide-worker-safety/paraquat-dichloride-one-sip-can-kill>

Human Health Interim Mitigation Decision – Published December 2016

Registration Review Draft Risk Assessments – Anticipated to be completed in 2019

Registration Review Interim Decision – Anticipated to be completed in 2020

Nature of Incidents

Fatalities

- 21 accidental deaths associated with the use of paraquat between 2000-2018
- Most fatalities (18) are the result of accidental ingestion of paraquat from a beverage container

Occupational Incidents

- In IDS, SENSOR, and CDPR/PISP, most paraquat incidents are occupational-related
 - Exposure commonly occurred as a result of:
 - Failure to wear adequate PPE
 - Leaks from application equipment or pesticide spills
 - Being directly sprayed with paraquat

2016 Human Health Mitigation Decision

Phase 1 – Most labels stamped Nov 2018; must be used within a year

- Label changes emphasizing paraquat toxicity and supplemental warning materials
- Restricting use of paraquat products to certified applicators only

Phase 2 – Training materials due Mar 2018; web site included on Phase 1 labels

- Targeted training materials for paraquat users

Phase 3 – Due March 30, 2019

- Closed-system packaging
 - The primary reason for requiring the closed system was to prevent users from illegally decanting into beverage containers, thereby hopefully preventing future accidental ingestion deaths
 - Closed system packaging is also expected to decrease the number/severity of dermal occupational incidents