

# Gesundheitliche Risikobewertung von Pflanzenschutzmitteln

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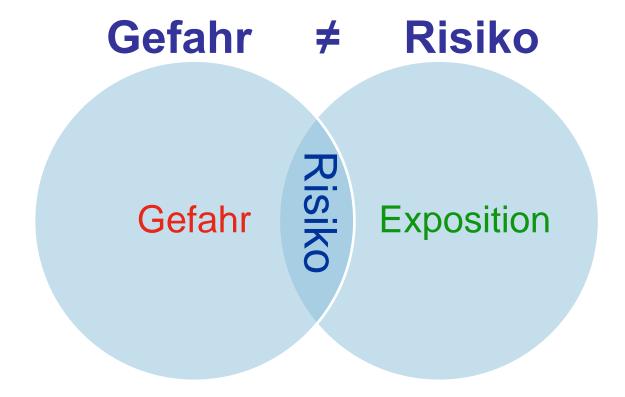
Fachgruppe Toxikologie der Präparate und Anwendungssicherheit

Abteilung: Sicherheit von Pestiziden

### Grundlagen der Risikobewertung

Verordnung (EG) Nr. 1107/2009

... keine schädlichen Auswirkungen auf die Gesundheit von Menschen...





#### Grundlagen der Risikobewertung



# **Exponierte Personengruppen**



Anwender



Nebenstehende



Arbeiter

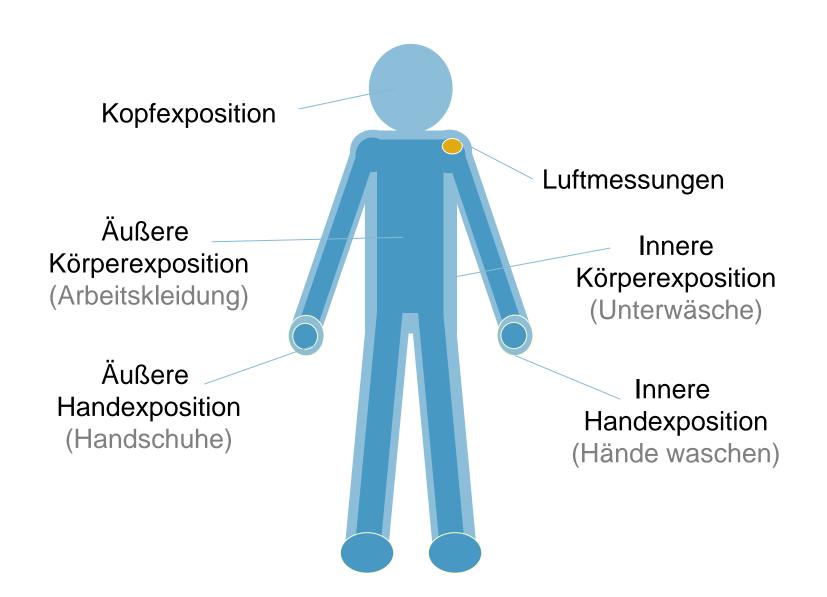


Anwohner



### **Expositionsbestimmung**

#### - Anwender -





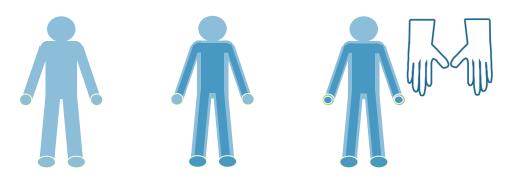




# Expositionsbestimmung

- Arbeiter -

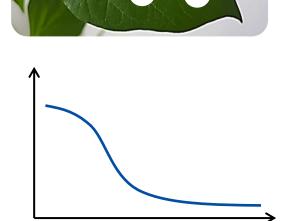
Transferkoeffizienten



Abstreifbare Rückstände

Abbaurate des Wirkstoffes

→ Wiederbetretungsauflage



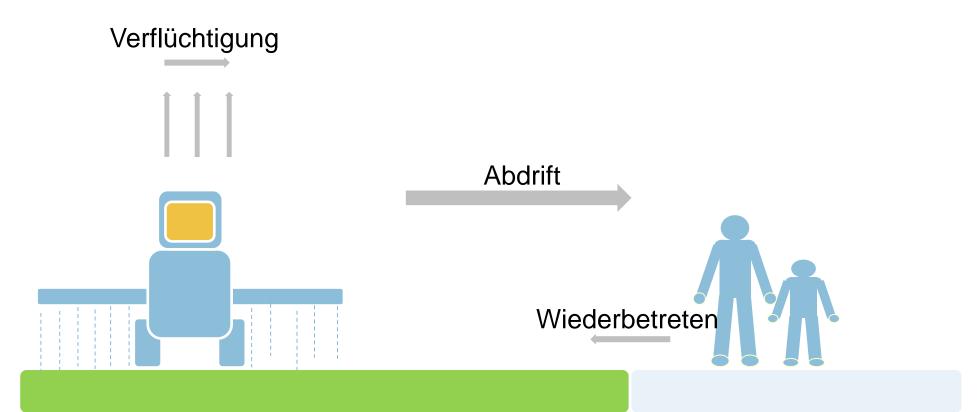






# Expositionsbestimmung

- Anwohner und Nebenstehende -



Kontakt mit Rückständen

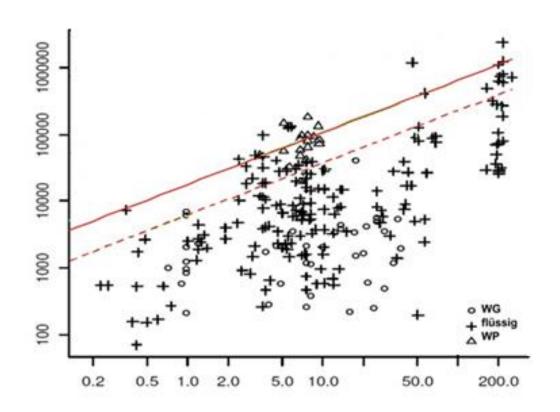


Quelle: iStockphoto



### Expositionsabschätzung

#### - Modellierung -





# Wirkstoff

Grenzwert (AOEL) Volatilität Abbaurate



# **Produkt**

Formulierungstyp
Dermale Absorption
Abstreifbare
Rückstände



# Szenario

Anwendungsbereich Kulturgruppe Anwendungstechnik Aufwandmenge



#### Expositionsabschätzung

- Harmonisierung in der EU -

EFSA Guidance on the Assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products

- ✓ Anwender von Pflanzenschutzmitteln
- ✓ Arbeiter bei Nachfolgearbeiten
- ✓ Anwohner, Nebenstehende

http://www.efsa.europa.eu/de/efsajournal/pub/3874



EFSA Journal 2014;12(10):3874

#### GUIDANCE OF EFSA

#### Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products<sup>1</sup>

European Food Safety Authority<sup>2,3</sup>

European Food Safety Authority (EFSA), Parma, Italy

This scientific output, published on 24 April 2015, replaces the earlier version published on 23 October 2014.\*

#### ABSTRACT

Regulation (EC) No 1107/2009 ensures that the residues of plant protection products (PPPs), consequent to application consistent with good plant protection practice and having regard to realistic conditions of use, shall not have any harmful effects on human health. In 2010, the EFSA Panel on Plant Protection Products and their Residues (PPR) prepared a Scientific Opinion on "Preparation of a Guidance Document on Pesticide Exposure Assessment for Workers, Operators, Residents and Bystanders", which highlighted some inconsistencies between the approaches adopted by regulatory authorities. Therefore, the PPR Panel proposed a number of changes to those practices in use (e.g. routine risk assessment for individual PPPs should continue to use deterministic methods, and a tiered approach to exposure assessment remains appropriate; there is a need to introduce an acute risk assessment for operators, workers and bystanders where PPPs are acutely toxic; for acute risk assessments, exposure estimates should normally be based on 95th percentiles of relevant datasets, whereas, for longer term risk assessments, the starting point should be a 75th percentile). To prepare a Guidance Document, an ad hoc working group was established to revise all available data and procedures to perform the operator, worker, resident and bystander risk assessment. In addition to the data reported in the PPR opinion, further data were made available to the working group which were analysed and considered. The opinion also identifies those scenarios for which exposure estimates are least satisfactory, and makes recommendations for further research that would reduce current uncertainties. An exposure calculation spreadsheet, reflecting the Guidance content, is annexed to this Guidance Document, to support stakeholders in performing the assessment of exposure and risk.

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#### KEY WORDS

exposure, operator, worker, bystander, resident, plant protection products, estimation, guidance, calculator

Suggested citation: EFSA (European Food Safety Authority), 2014. Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products. EFSA Journal 2014;12(10):3874, 55 pp., doi:10.2903/j.efsa.2014.3874

Available online: www.efsa.europa.eu/efsajouma

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On request from European Commission, Question No EFSA-Q-2011-01062, approved on 17 October 2014.

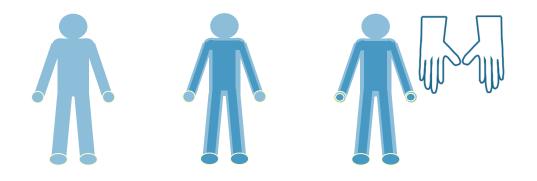
Correspondence: pesticides.ppr@efsa.europa.eu

<sup>&</sup>lt;sup>3</sup> Acknowledgement: EFSA wishes to thank the members of the Working Group on the operator, worker, resident and bystander exposure assessment: Claudia Grosskopf (as of September 2013), Paul Y Hamey, Kyriaki Machera, Sabine Martin, Walter Steurbaut for the preparatory work on this scientific output, the hearing expert: Georgina Downs, and EFSA staff: Lena Elisabeth Jacobi (until October 2012), Jane Richardson, Istvan Sebestyen (until May 2012), Hans Steinkellner (until April 2014) and Manuela Tiramani for the support provided to this scientific output.

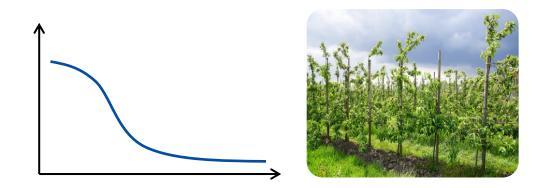
<sup>\*</sup> In the Excel calculator, the AOEM values for 95<sup>th</sup> percentile Operator mixing/loading head exposure were corrected, resident and bystander exposure for manual applications was included in the summary, and Cell B78 in Resident exposure worksheet was corrected to C22 (previously DC22).

# Risikominderungsmaßnahmen

#### Arbeitskleidung & Schutzausrüstung



#### Wiederbetretungsbeschränkung



#### Driftreduktion

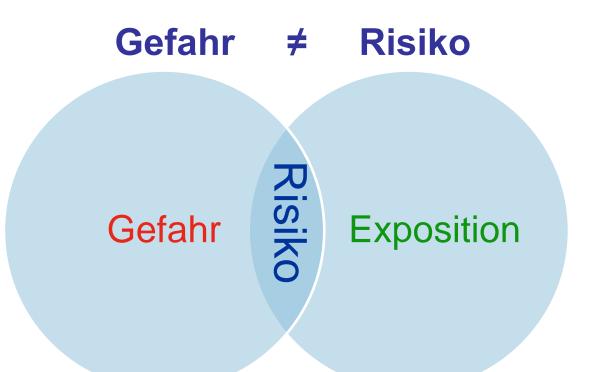


Abstandsregeln



#### **Fazit**



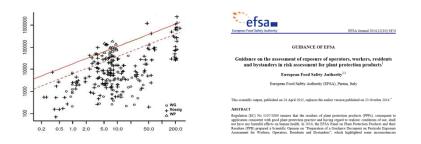




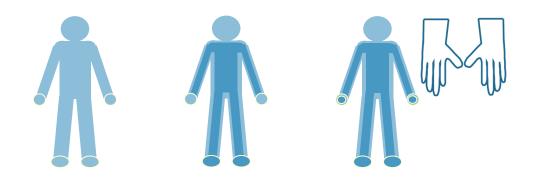
Nur bei sachgerechter und bestimmungsgemäßer Anwendung, einschließlich dem Tragen der vorgegebenen Arbeitskleidung bzw. der persönlichen Schutzausrüstung und bei Einhaltung weiterer vorgegebener Risikominderungsmaßnahmen kann eine sichere Anwendung gewährleistet und der Gesundheitsschutz sichergestellt werden!

#### **Ausblick**

1. Exposition messen, Modelle weiterentwickeln und harmonisieren



2. Praktikabilität und Anwendung von Risikominderungsmaßnahmen weiter optimieren





ttps://www.ble-medienservice.de/1042/vorsicht-beim-umgang-mitflanzenschutzmitteln?c=230https://www.bmel.de/SharedDocs/Downloads/Brosc ueren/Flyer-Poster/Flyer\_Pflanzenschutzanwendung.pdf?\_\_blob=publicationFile

3. Risikokommunikation verstärken



#### Danke für Ihre Aufmerksamkeit

Sabine Martin

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