



Published on *Ecologic Institute: Science and Policy for a Sustainable World*
(<https://www.ecologic.eu>)

[Home](#) > Umweltwirkungen von Tierarzneimitteln

PUBLICATION

Document
Agriculture
Education
Health
Soil
Sustainability
Water

Umweltwirkungen von Tierarzneimitteln

UNTERRICHTSMATERIAL FÜR LANDWIRTSCHAFTLICHE BERUFSSCHULEN



Residues of veterinary pharmaceuticals may enter water and soil via manure and dung. Farmers can reduce this environmental impact through their farming practices. These teaching materials were designed for agricultural vocational schools. They contain worksheets, information on classroom design and background information for teachers. The teaching materials are available to teachers and learners for free use.

These teaching materials are intended to sensitise trainees from agricultural vocational schools to the problem of the environmental effects of veterinary pharmaceuticals so that they can subsequently develop action-oriented solutions.

The learning objectives of this teaching unit include:

- understanding definitions of target and non-target organisms
- distinguishing between desired effects, side effects and undesired environmental effects
- trace processes of veterinary pharmaceuticals in the environment (degradation, relocation and fate)
- understanding the effects of certain veterinary pharmaceuticals on the environment
- raising awareness of the problems involved in the future handling of veterinary pharmaceuticals

The teaching materials were developed under the lead of Ecologic Institute for the German Federal Environment Agency (UBA).

Main Link

Download teaching material: Umweltwirkungen von Tierarzneimitteln [pdf, 1.2 MB, German]

Ecologic Related Articles

- Minimierung der landwirtschaftlichen Einträge von Tierarzneimitteln in die Umwelt
- Umweltaspekte von Tierarzneimitteln in der tiermedizinischen Praxis
- Verschleppung von Tierarzneimitteln in die Umwelt
- Communication Strategies for Reducing Agriculture-related Entry of Veterinary Pharmaceuticals into the Environment
- Internet Portal on "Veterinary Pharmaceuticals in the Environment"
- Landwirtschaft - Tierarzneimittel - Umwelt
- Tierarzneimittel in der Umwelt: Abbau, Verlagerung und Verbleib
- Verschleppung von Tierarzneimitteln im Stall
- Umwelt-Checkliste für den Einsatz von Tierarzneimitteln
- Environmental Risks in the Authorisation Process of Veterinary Pharmaceuticals
- Establishing an Environmental Monograph System for Veterinary Medicinal Products

Citation

Umweltbundesamt (ed.) 2018: Umweltwirkungen von Tierarzneimitteln. Unterrichtsmaterial für landwirtschaftliche Berufsschulen.

Language

German

Author(s)

Julia Steinhoff-Wagner (Institut für Tierwissenschaften/Rheinische Friedrich-Wilhelms-Universität Bonn)
Ruth Haupt (Institut für Tierwissenschaften/Rheinische Friedrich-Wilhelms-Universität Bonn)
Simone M. Schmid (Institut für Tierwissenschaften/Rheinische Friedrich-Wilhelms-Universität Bonn)
Susanne Lehnert (Institut für Tierwissenschaften/Rheinische Friedrich-Wilhelms-Universität Bonn)
Brigitte Petersen (Institut für Tierwissenschaften/Rheinische Friedrich-Wilhelms-Universität Bonn)

Credits

Editing: Arne Hein (Federal Environment Agency)
Project lead: Melanie Kemper (Ecologic Institute)
Layout and design: Beáta Welk Vargová (Ecologic Institute)

Funding

- Federal Environment Agency (UBA), Germany

Publisher

- Federal Environment Agency (UBA), Germany

Year

| | |
|--------------------------|---|
| Published In | 2018 |
| ISSN | Internet portal: Veterinary Pharmaceuticals in the Environment [German] |
| Dimension | 1862-4359 |
| Project | 13 pp. |
| Project ID | Communication Strategies for Reducing Agriculture-related Entry of Veterinary Pharmaceuticals into the Environment |
| Table of Contents | 2590 |
| | <ul style="list-style-type: none"> 1 Unterrichtsplan 2 Lernziele <ul style="list-style-type: none"> 2.1 Lernziele der Unterrichtseinheit (45 min) 2.2 Einordnung der Lernziele in den Rahmenlehrplan 3 Informationen zur Unterrichtsgestaltung <ul style="list-style-type: none"> 3.1 Einleitung 3.2 Erarbeitung 1 3.3 Erarbeitung 2 3.4 Zusammenfassung 4 Hintergrundinformationen für Lehrende 5 Arbeitsblatt 1: Abbau, Verlagerung und Verbleib von Tierarzneimitteln in der Umwelt <ul style="list-style-type: none"> 5.1 Druckvorlage 5.2 Musterlösung 6 Arbeitsblatt 2: Beispiele für Auswirkungen von Tierarzneimitteln auf Nichtzielorganismen <ul style="list-style-type: none"> 6.1 Druckvorlage 6.2 Musterlösung |
| Keywords | veterinary drugs, medicine, pharmaceuticals, environment, farmers, agriculture, environmental impact, antibiotics, water, groundwater, soil, soil functionality, soil ecosystem, food, drinking water, environmental impact, , teaching material, learning material, training and further education, training material, infographics, worksheet, teaching unit |

Source URL (modified on 02/27/2019 - 07:41): <https://www.ecologic.eu/16275>

Links

[1] <https://www.ecologic.eu/sites/files/presentation/2019/tam-umweltwirkungen.png>