



# Safe disposal of pharmaceutical wastes 1 (Short Version Part 1)

(Resource ID: 374)

**Samantha Prior**

samantha.prior(at)ul.ie

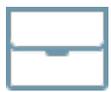
This teaching resource is allocated to following University:

**UL - University of Limerick**

Institution:

**University of Limerick**

<http://www.sustainicum.at/en/modules/view/374.Safe-disposal-of-pharmaceutical-wastes-1-Short-Version-Part-1>



**Individual work**  
**Group work**



**11 to 30**  
**students**



**Up to 3 lecture**  
**units**



**English, Shqip**

The teaching resource outline Safe disposal of pharmaceutical wastes (Short Version Part 1, 2 and 3) describes the draft of a teaching resource consisting of 3 parts, that has been developed to make students look at their own methods of pharmaceutical waste disposal, as well as that of pharmaceutical industries in both the public and private sector, and to realise the damage it is having on both the environment and the economy. Students will be introduced to the FDA recommendations for safe disposal of pharmaceutical wastes and will present their suggestions of both safe and sustainable methods of disposal to the stakeholders. These teaching resources will incorporate but are not limited to the following methods: Mental Mapping, Debating, Case Study Teaching,

Researching, Educational Games, a Focus Group and a Discussion. The set describes three independent teaching resources, which are designed to be completed one after another (but not necessarily), these include: 1. Mental Map – How do you dispose of Pharmaceutical Waste? and a Debate 2. Case Study Teaching – Comparison of the Public and Private Sector 3. An Educational Game and a Focus Group Safe disposal of pharmaceutical wastes (Short Version Part 1, 2 and 3) is based (and slightly modified) on the Teaching Resource, “Safe disposal of waste pharmaceuticals - medicine take back programs” The original teaching resource was split into several parts to make it easier to introduce new ideas, teaching styles and teaching methods into lectures, in addition to the original lecture content. All parts do not need to be completed.

### **Part 1 – Mental Map – How do you dispose of Pharmaceutical Waste? and a Debate**

The lesson will begin with students working individually creating a mental map of how they dispose of pharmaceutical wastes. The students will be asked to look at each other’s mental maps and compare and contrast their methods of disposal. The students will be then asked to debate as to why their chosen method of disposal of pharmaceutical waste is correct.

#### **Main Text:**

The aim of this resource is to raise awareness of the problem of expired and unwanted drugs, using the methods outlined in this resource, the students will try to figure out what is happening with the expired drugs that are accumulating in pharmaceutical industries, and even look at their own methods of disposal.

The pharmaceutical industry develops, produces, and markets drugs or pharmaceuticals for use as medications. When this medicine is not used by the patients it becomes a waste that has to be disposed of, something which is not being done correctly, and is causing serious harm to both the economy and the environment.

The teaching methods used aim to identify mistakes that are being made by all members of society when disposing of pharmaceutical waste, with the hope of creating an outline of sustainable methods of disposal for both

industries and the wider community.

---

## Teaching Tools & Methods



Mini-project

### Integration of Social Stakeholders

The role of all stakeholders on this module is to provide us with information to change the way of disposing of unwanted pharmaceuticals. The stakeholders will play an active role, providing case studies and participating in a focus group.

#### Strength

- It allows students to be exposed to new environments in order to increase their depth of understanding
- Hands-on experience which is critical for skill development
- Encourages students to appreciate diverse landscapes and helps them recognise the importance of conserving and preserving the environment
- Students will have some idea of pharmaceutical wastes, what they should do in the future, and they will be a great source of information for others the community
- Mutual learning for students and business stakeholders

#### Weakness

- Confidentiality problems – students may be inclined to disclose information to competitors.
- Difficult to arrange a visit that suits all stakeholders

#### Learning Outcomes

- Identify methods of pharmaceutical waste disposal used at home
- Compare and contrast safe methods of pharmaceutical waste disposal
- Debate the best methods of waste disposal

#### Relevance for Sustainability

It is directly related to safety and environmental protection as it:

- Prevents poisoning of children and pets
- Deters misuse by teenagers and adults
- Avoids health problems from accidentally taking the wrong medicine, too much of the same medicine, or a medicine that is too old to work well
- Keeps medicines from entering streams and rivers when poured down the drain or flushed down the toilet

## Related Teaching Resources

Some knowledge of pharmaceuticals is needed.

## Preparation Efforts

Low

## Preparation Efforts Description

N/A

## Access

Free

## Assessment

N/A

## Credit/Certification Description

N/A

## Sources and Links

Original Teaching Resource - <http://sustainicum.at/en/modules/view/301>

## Funded by

This teaching resource, realised within the project ConSus, has been funded with the support of the TEMPUS of the European Union. The contents reflect the views of the authors, and the European Commission cannot be held responsible for any use which may be made of the information contained therein.

