

Risk Assessment for RAPEX

General Information

Product

Product name: Rotary push lawn mower (gasoline driven)

Product category: Lawn mowers

Description: This is a PROSAFE risk assessment template for gasoline driven rotary push lawn mowers intended for private gardens. It describes likely injury scenarios for the most common and risky non-compliances for such lawn mowers.

The scenarios consider the following non-compliances:
The stopping system doesn't work or stops too late.
The protective covering of the lawn mower does not protect the user adequately.

How to use

Users should select those scenarios that correspond to the non-compliances identified in the product under assessment.

All other scenarios are deleted.

The probabilities are estimated in the remaining scenarios.

Users are reminded that the scenarios presented in the template are likely scenarios. Users should always assure that the scenarios do indeed give a good representation of the situation that is being assessed. This includes among other things checking that the scenario is suitable, that the steps are correct and that the injury level is appropriate.

Disclaimer

The template has been developed by a PROSAFE working group composed of market surveillance experts. The intention is to support market surveillance officials assessing the risk with a particular product as part of a market surveillance case.

The template is not authorized or endorsed in any way and it is not binding for Member State market surveillance authorities.

The contents of the original template is subject to change without notice.

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Product risks - Overview

Scenario 1 : **Risk to be determined** - An operator is using the lawn mower. The stopping system does not comply with the safety requirements and stops the mower too late. The operator falls backwards and loses the grip. The stopping system doesn't work or stops too late. The rotating knives cause cutting injuries to the feet of the operator.

Scenario 2 : **Risk to be determined** - An operator is moving the lawn mower. The protective covering of the lawn mower provides inadequate coverage of the knives. The knives hit a solid object (a stone). The mechanical strength of the protective covering is inadequate or it leaves too much space so the stone can be slung out from underneath the mower. A young nearby child is hit in the eye by the stone. The eye is blinded.

Overall risk : **Risk to be determined**

Scenario 1 : Other consumers - Rotating parts

Product hazard

Hazard Group: Kinetic energy

Hazard Type: Rotating parts

Consumer

Consumer Type: Other consumers - Consumers other than vulnerable or very vulnerable consumers

How the hazard causes an injury to the consumer

Injury scenario: An operator is using the lawn mower. The stopping system does not comply with the safety requirements and stops the mower too late. The operator falls backwards and loses the grip. The stopping system doesn't work or stops too late. The rotating knives cause cutting injuries to the feet of the operator.

Severity of Injury

Injury: Amputation
 Level: 3 Finger(s)
 Toe(s)
 Hand
 Foot
 (Part of) Arm
 Leg
 Eye

Probability of the steps to injury

Step(s) to Injury	Probability
Step 1: An operator is using the lawn mower with a stopping system that does not comply with the safety requirements because it stops the mower too late.	1
Step 2: The operator falls backwards and loses the grip.	
Step 3: The stopping system doesn't work or stops too late. (The probability depends upon the exact functioning of the non-compliant stopping system.)	
Step 4: The rotating knives cause cutting injuries to the feet of the operator. (The probability depends upon the geometry of the lawn mower, in particular the protective shield.)	

Calculated probability:

To be determined

Overall probability:

To be determined

Risk of this scenario:

Risk to be determined

Scenario 2 : Young children - Flying objects

Product hazard

Hazard Group: Kinetic energy
Hazard Type: Flying objects

Consumer

Consumer Type: Young children - Older than 36 months and younger than 8 years (Vulnerable consumers)

How the hazard causes an injury to the consumer

Injury scenario: An operator is moving the lawn mower. The protective covering of the lawn mower provides inadequate coverage of the knives. The knives hit a solid object (a stone). The mechanical strength of the protective covering is inadequate or it leaves too much space so the stone can be slung out from underneath the mower. A young nearby child is hit in the eye by the stone. The eye is blinded.

Severity of Injury

Injury: Eye injury, foreign body in eye
Level: 3 Partial loss of sight
Permanent loss of sight (one eye)

Probability of the steps to injury

Step(s) to Injury	Probability
Step 1: An operator is using the lawn mower where the protective covering provides inadequate coverage of the knives.	1
Step 2: The knives hit a solid object (a stone).	
Step 3: The mechanical strength of the protective covering is inadequate or it leaves too much space so the stone can be slung out from underneath the mower. (The probability depends upon the strength and geometry of the protective shield.)	
Step 4: A young nearby child is hit in the eye by the stone. (The probability can be estimated from geometrical calculations of the distance to the mower and the area of the eye.)	
Step 5: The eye is blinded. (The injury level and the probability depends upon the velocity of the stone plus weight and shape of typical stones in that country.)	

Calculated probability:

To be determined

Overall probability:

To be determined

Risk of this scenario:

Risk to be determined