

# Risk Assessment for RAPEX

## General Information

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### Product

Product name: Children's cots and travel cots

Product category: Childcare articles

Description: This is a PROSAFE risk assessment template for children's cots and travel cots. It describes likely injury scenarios linked to non-conformity with the following clauses of standard EN 716-1:2008+A1:2013:

- §4.4.1.3 Detachable label
- §4.4.1.4 Accessible small parts
- §4.4.2.1 Openings between side bars too large
- §4.4.3 Head entrapment on the outside of the cot
- §4.4.5 Snag points
- §4.4.7.3 and §4.4.8.3 Distance between slats of the cot base
- §4.4.8.2 Sides too low
- §4.5 Final stability

### How to use

Users of the template should select the scenario(s) corresponding to the non-conformities identified for the product under assessment. All other scenarios can then be deleted.

The probabilities are estimated in the remaining scenarios.

The scenarios presented in the template are likely scenarios. Users should ensure that the scenarios are 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** - A baby is in the cot, unsupervised and playing. The cot has a detachable lable within the baby's reach. The baby pulls the label off. The baby puts the lable over the mouth and nose. This stops the oxygen flow temporarily.
- Scenario 2 : **Risk to be determined** - A baby is in the cot, unsupervised and playing. The cot has small detachable parts within the baby's reach. The baby pulls off a small part. The baby puts the small parts in its mouth. The small part gets into the airways and blocks the oxygen flow.
- Scenario 3 : **Risk to be determined** - A baby is in the cot, unsupervised and playing. The openings between the bars in the of the cot are too large. The baby puts an arm or a leg in between two bars and is trapped. The baby gets afraid and pulls itself backward and gets a dislocation of an ankle, wrist, shoulder or knee.
- Scenario 4 : **Risk to be determined** - A baby is outside the cot without adult supervision. The baby puts its head into the pocket. The head gets trapped and the baby is unable to free itself. The baby is suffocated.
- Scenario 5 : **Risk to be determined** - The child is in a cot with a snag point. The child wears clothing or cords around its neck (for instance a soother holder). The child leans over and the cord is entangled around the snag point. The child is incapable of raising its weight to release the pressure. The child is strangulated.
- Scenario 6 : **Risk to be determined** - A baby is in the cot, unsupervised and playing. The mechanical strength of the cot base is insufficient. The baby jumps up and down in the bed. The base breaks. The baby cuts itself on the proken slats.
- Scenario 7 : **Risk to be determined** - A baby is in the cot, unsupervised and playing. The sides of the cot are too low. The baby wakes up, rises and wants to get out. The baby climbs over the side walls and falls down. The baby falls on its head and gets a skull fracture.
- Scenario 8 : **Risk to be determined** - Child is inside an unstable travel cot. Child moves and leans over the cot side. The cot tips over. The child falls and hits head. The child is unconscious.

Overall risk : **Risk to be determined**

# Scenario 1 : Very young children - Product is impermeable to air

## Product hazard

Hazard Group: Size, shape and surface  
 Hazard Type: Product is impermeable to air

## Consumer

Consumer Type: Very young children - 0 to 36 months (Very vulnerable consumers)

## How the hazard causes an injury to the consumer

Injury scenario: A baby is in the cot, unsupervised and playing. The cot has a detachable lable within the baby's reach. The baby pulls the label off. The baby puts the lable over the mouth and nose. This stops the oxygen flow temporarily.

## Severity of Injury

Injury: Suffocation / Strangulation  
 Level: 3 Oxygen flow to brain blocked without permanent consequences

## Probability of the steps to injury

Step(s) to Injury	Probability
Step 1: A baby is playing unsupervised in the cot that has a detachable lable within the baby's reach.	1
Step 2: The baby pulls the label off. (The probability depends upon the size, shape and location of the label and the force that is required to pull it off.)	
Step 3: The baby puts the lable over the mouth and nose.	
Step 4: This stops the oxygen flow temporarily. (The probability depends upon the size and flexibility of the label.)	

**Calculated probability:**

To be determined

**Overall probability:**

To be determined

**Risk of this scenario:**

Risk to be determined

## Scenario 2 : Very young children - Product is or contains small part

### Product hazard

Hazard Group: Size, shape and surface  
 Hazard Type: Product is or contains small part

### Consumer

Consumer Type: Very young children - 0 to 36 months (Very vulnerable consumers)

### How the hazard causes an injury to the consumer

Injury scenario: A baby is in the cot, unsupervised and playing. The cot has small detachable parts within the baby's reach. The baby pulls off a small part. The baby puts the small parts in its mouth. The small part gets into the airways and blocks the oxygen flow.

### Severity of Injury

Injury: Internal airway obstruction  
 Level: 4 Oxygen flow to brain blocked with permanent consequences

### Probability of the steps to injury

	Step(s) to Injury	Probability
Step 1:	A baby is playing unsupervised in the cot that has small detachable parts within the baby's reach.	1
Step 2:	The baby pulls off a small part. (The probability depends upon the shap and location of the small part as well as the force required to pull it off.)	
Step 3:	The baby puts the small parts in its mouth.	
Step 4:	The small part gets into the airways and blocks the oxygen flow. (The probability depends upon the size and shape of the small part.)	

**Calculated probability:**

To be determined

**Overall probability:**

To be determined

**Risk of this scenario:**

Risk to be determined

## Scenario 3 : Very young children - Gap or opening between elements

### Product hazard

Hazard Group: Size, shape and surface  
 Hazard Type: Gap or opening between elements

### Consumer

Consumer Type: Very young children - 0 to 36 months (Very vulnerable consumers)

### How the hazard causes an injury to the consumer

Injury scenario: A baby is in the cot, unsupervised and playing. The openings between the bars in the of the cot are too large. The baby puts an arm or a leg in between two bars and is trapped. The baby gets afraid and pulls itself backward and gets a dislocation of an ankle, wrist, shoulder or knee.

### Severity of Injury

Injury: Dislocation  
 Level: 3 Ankle  
 Wrist  
 Shoulder  
 Hip  
 Knee  
 Spine

### Probability of the steps to injury

Step(s) to Injury	Probability
Step 1: A baby is playing unsupervised in the cot that has too wide openings between the bars.	1
Step 2: The baby puts an arm or a leg in between two bars and is trapped. (The probability depends upon the actual distance.)	
Step 3: The baby gets afraid and pulls itself backward and gets a dislocation of an ankle, wrist, shoulder or knee. (Other injuries with other severities should be considered.)	

**Calculated probability:**

To be determined

**Overall probability:**

To be determined

**Risk of this scenario:**

Risk to be determined



## Scenario 4 : Very young children - Gap or opening between elements

### Product hazard

Hazard Group: Size, shape and surface  
Hazard Type: Gap or opening between elements

### Consumer

Consumer Type: Very young children - 0 to 36 months (Very vulnerable consumers)

### How the hazard causes an injury to the consumer

Injury scenario: A baby is outside the cot without adult supervision. The baby puts its head into the pocket. The head gets trapped and the baby is unable to free itself. The baby is suffocated.

### Severity of Injury

Injury: Suffocation / Strangulation  
Level: 4 Fatal suffocation / strangulation

### Probability of the steps to injury

Step(s) to Injury	Probability
Step 1: A baby is outside the cot without adult supervision.	
Step 2: The baby puts its head into the pocket. The head gets trapped and the baby is unable to free itself. The baby is suffocated.	
Step 3: The head gets trapped and the baby is unable to free itself.	
Step 4: The baby is suffocated.	

**Calculated probability:**

To be determined

**Overall probability:**

To be determined

**Risk of this scenario:**

Risk to be determined

## Scenario 5 : Very young children - Gap or opening between elements

### Product hazard

Hazard Group: Size, shape and surface  
Hazard Type: Gap or opening between elements

### Consumer

Consumer Type: Very young children - 0 to 36 months (Very vulnerable consumers)

### How the hazard causes an injury to the consumer

Injury scenario: The child is in a cot with a snag point. The child wears clothing or cords around its neck (for instance a soother holder). The child leans over and the cord is entangled around the snag point. The child is incapable of raising its weight to release the pressure. The child is strangled.

### Severity of Injury

Injury: Suffocation / Strangulation  
Level: 4 Fatal suffocation / strangulation

### Probability of the steps to injury

	Step(s) to Injury	Probability
Step 1:	The child is in a cot with a snag point.	1
Step 2:	The child wears clothing or cords around its neck (for instance a soother holder).	
Step 3:	The child leans over and the cord is entangled around the snag point.	
Step 4:	The child is incapable of raising its weight to release the pressure.	
Step 5:	The child is strangled.	

**Calculated probability:**

To be determined

**Overall probability:**

To be determined

**Risk of this scenario:**

Risk to be determined

## Scenario 6 : Very young children - Sharp corner or point

### Product hazard

Hazard Group: Size, shape and surface  
Hazard Type: Sharp corner or point

### Consumer

Consumer Type: Very young children - 0 to 36 months (Very vulnerable consumers)

### How the hazard causes an injury to the consumer

Injury scenario: A baby is in the cot, unsupervised and playing. The mechanical strength of the cot base is insufficient. The baby jumps up and down in the bed. The base breaks. The baby cuts itself on the broken slats.

### Severity of Injury

Injury: Laceration, cut  
Level: 2 External (deep) (>10cm long on body)  
(>5cm long on face) requiring stitches  
Tendon or into joint  
White of eye or Cornea

### Probability of the steps to injury

	Step(s) to Injury	Probability
Step 1:	A baby is playing unsupervised in the cot that has a base with insufficient mechanical strength.	1
Step 2:	The baby jumps up and down in the bed.	
Step 3:	The base breaks. (The probability depends upon the force required to break the cot base.)	
Step 4:	The baby cuts itself on the broken slats. (Other injuries are possible. The actual injury depends upon how the base breaks.)	

**Calculated probability:**

To be determined

**Overall probability:**

To be determined

**Risk of this scenario:**

Risk to be determined

## Scenario 7 : Very young children - High position of user

### Product hazard

Hazard Group: Potential energy  
Hazard Type: High position of user

### Consumer

Consumer Type: Very young children - 0 to 36 months (Very vulnerable consumers)

### How the hazard causes an injury to the consumer

Injury scenario: A baby is in the cot, unsupervised and playing. The sides of the cot are too low. The baby wakes up, rises and wants to get out. The baby climbs over the side walls and falls down. The baby falls on its head and gets a skull fracture.

### Severity of Injury

Injury: Fracture  
Level: 3 Ankle  
Leg (femur and lower leg)  
Hip  
Thigh  
Skull  
Spine (minor compression fracture)  
Jaw (severe)  
Larynx  
Multiple rib fractures  
Blood or air in chest

### Probability of the steps to injury

	Step(s) to Injury	Probability
Step 1:	A baby is playing unsupervised in the cot that has too low sides.	1
Step 2:	The baby wakes up, rises and wants to get out.	
Step 3:	The baby climbs over the side walls and falls down. (The probability depends upon the actual height of the side walls.)	
Step 4:	The baby falls on its head and gets a skull fracture. (Other injuries and injury levels are possible. It depends inter alia on the actual height of the cot.)	

**Calculated probability:**

To be determined

**Overall probability:**

**To be determined**

**Risk of this scenario:**

**Risk to be determined**

## Scenario 8 : Very young children - Low mechanical stability

### Product hazard

Hazard Group: Potential energy  
Hazard Type: Low mechanical stability

### Consumer

Consumer Type: Very young children - 0 to 36 months (Very vulnerable consumers)

### How the hazard causes an injury to the consumer

Injury scenario: Child is inside an unstable travel cot. Child moves and leans over the cot side. The cot tips over. The child falls and hits head. The child is unconscious.

### Severity of Injury

Injury: Concussion  
Level: 3 Prolonged unconsciousness

### Probability of the steps to injury

	Step(s) to Injury	Probability
Step 1:	Child is inside an unstable travel cot.	1
Step 2:	Child moves and leans over the cot side.	
Step 3:	The cot tips over.	
Step 4:	The child falls and hits head.	
Step 5:	The child is unconscious.	

**Calculated probability:**

To be determined

**Overall probability:**

To be determined

**Risk of this scenario:**

Risk to be determined