

# Health&Care Information Model: nl.zorg.Brandwond

Final

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# 1. nl.zorg.Brandwond-v3.0

DCM::CoderList	Werkgroep RadB Verpleegkundige Gegevens
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	Werkgroep RadB Verpleegkundige Gegevens
DCM::CreationDate	18-9-2014
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.19.4
DCM::KeywordList	Brandwond
DCM::LifecycleStatus	Final
DCM::ModelerList	Werkgroep RadB Verpleegkundige Gegevens
DCM::Name	nl.zorg.Brandwond
DCM::PublicationDate	1-5-2016
DCM::PublicationStatus	Published
DCM::ReviewerList	Projectgroep RadB Verpleegkundige Gegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	8-9-2015
DCM::Superseeds	nl.nfu.Brandwondv1.0
DCM::Version	3.0

## 1.1 Revision History

Publicatieversie 1.0 (01-07-2015)

Publicatieversie 3.0 (01-05-2016)

Bevat: ZIB-453

## 1.2 Concept

A burn wound is a wound caused by skin being exposed to heat for a certain time above a certain critical temperature. Heat above this critical temperature (+/- 40°C) will cause damage to the skin. There are different types of burn wounds, which are categorized according to the depth of the burn wound.

The depth of the burn wound depends on:

- the temperature of the impacting heat;
- the duration of the impact of heat on the skin;
- the source of the burn (e.g. fire, fluid).

## 1.3 Mindmap

## 1.4 Purpose

The description of the burn wound is of importance for starting or continuing the best possible wound treatment and to be able to properly monitor the wound healing process.

## 1.5 Patient Population

## 1.6 Evidence Base

Different degrees are used to evaluate the depth of the burn wound:

First-degree burn (no wound):

- no blisters, no open wounds
- redness
- good capillary refill
- supple
- painful

Superficial second-degree burn wound (partial thickness of the skin):

- intact / broken blisters
- pink, shiny, uniform
- good capillary refill
- supple
- painful

Deep second-degree burn wound:

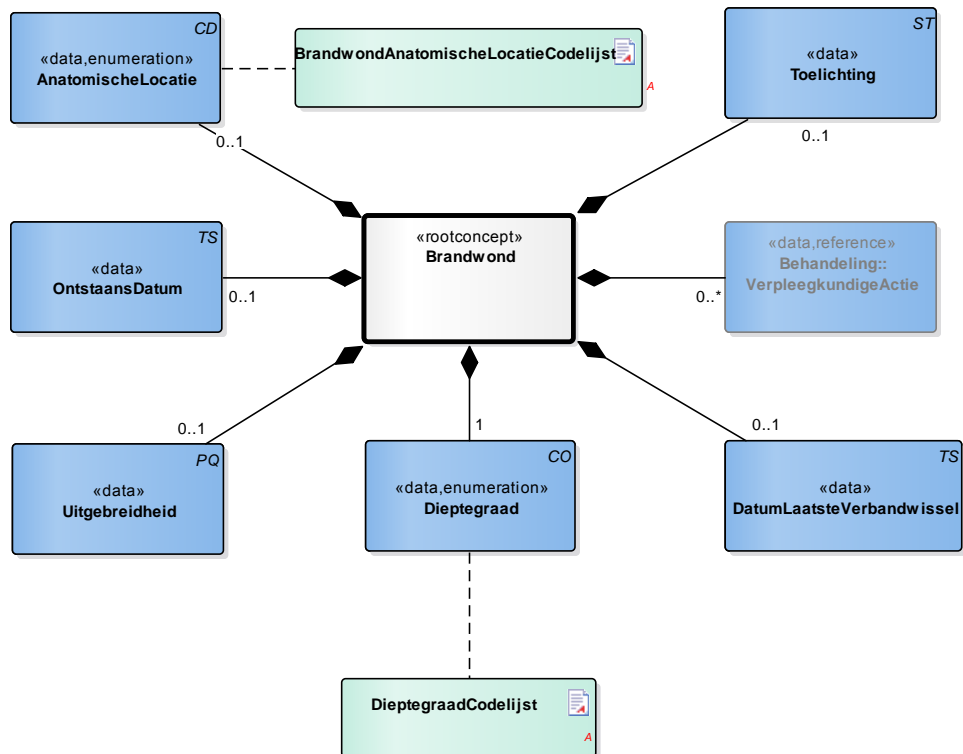
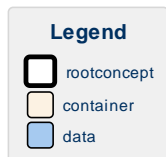
- intact / broken blisters
- pink, matte, not homogenous, damp
- slow capillary refill
- slightly more firm
- painful

Third-degree burn wound

- intact / broken blisters, epidermis stuck to burned dermis
- white, brown, yellow, red (when kept in hot water for a prolonged period of time)
- no capillary refill, non-removable redness
- firm
- less painful than the size of the wound makes it appear

(Source: Brandwondenprotocol 2010, Rode Kruis Brandwondencentrum Beverwijk [2010 Burn wound protocol, Beverwijk Red Cross Burn Wound Center])

## 1.7 Information Model



«rootconcept»	Brandwond	
Alias	EN: BurnWound	
Definition	Root concept of the BurnWound building block. This concept contains all data elements of the BurnWound building block.	
Datatype		
DCM::DefinitionCode	SNOMED CT: 48333001 Burn	
DCM::DefinitionCode	NL-CM:19.4.1	
Options		

«data»	Dieptegraad	
Alias	EN: Depth	
Definition	Description of the severity of the burn wound, ranging from degree 1 - 3.	
Datatype	CO	
DCM::DefinitionCode	NL-CM:19.4.2	
DCM::ExampleValue	2e graads, oppervlakkig	
DCM::ValueSet	DieptegraadCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.4.1
Options		

«data»	Uitgebreidheid	
Alias	EN: Extent	
Definition	The extent of a burn wound is indicated in a percentage of the 'Total Body Surface Area' (TBSA). For adults, the TBSA can be calculated on the basis of the 'rule of nines', in which body parts are expressed in the percentage 9 and multiples of 9. This 'rule of nines' cannot be used for children because a child's body proportions are different from those of an adult. For children, separate tables were developed per age group to determine the extent of burn wounds. Another option is measuring the extent using the patient's hand surface area. The surface area of a patient's hand (including the fingers) equals approximately 1% of their total body surface area.	

	(Source: Brandwonden genezen. Hoe verder? [Healing Burn Wounds. What now?])
<b>Datatype</b>	PQ
<b>DCM::DefinitionCode</b>	NL-CM:19.4.7
<b>DCM::ExampleValue</b>	27%
<b>Options</b>	

<b>«data»</b>	<b>OntstaansDatum</b>
<b>Alias</b>	EN: StartDate
<b>Definition</b>	Date on which the burn wound appeared.
<b>Datatype</b>	TS
<b>DCM::DefinitionCode</b>	NL-CM:19.4.3
<b>DCM::ExampleValue</b>	01-07-2014
<b>Options</b>	

<b>«data»</b>	<b>AnatomischeLocatie</b>
<b>Alias</b>	EN: AnatomicalLocation
<b>Definition</b>	The location of the burn wound on the body.
<b>Datatype</b>	CD
<b>DCM::DefinitionCode</b>	NL-CM:19.4.4
<b>DCM::ExampleValue</b>	Linker bil
<b>DCM::ValueSet</b>	BrandwondAnatomischeLocatieCodelijst OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.4.2
<b>Options</b>	

<b>«data»</b>	<b>Toelichting</b>
<b>Alias</b>	EN: Explanation
<b>Definition</b>	Explanation of the burn wound.
<b>Datatype</b>	ST
<b>DCM::DefinitionCode</b>	NL-CM:19.4.5
<b>DCM::DefinitionCode</b>	LOINC: 48767-8 Annotation comment
<b>Options</b>	

<b>«data»</b>	<b>DatumLaatsteVerbandwissel</b>
<b>Alias</b>	EN: DateOfLastDressingChange
<b>Definition</b>	Date on which the dressing was last changed.
<b>Datatype</b>	TS
<b>DCM::DefinitionCode</b>	NL-CM:19.4.8
<b>DCM::ExampleValue</b>	10-10-2014
<b>Options</b>	

<b>«data»</b>	<b>Behandeling::VerpleegkundigeActie</b>
<b>Alias</b>	EN: Treatment::NursingProcedure
<b>Definition</b>	The procedures carried out to treat the burn wound.
<b>Datatype</b>	
<b>DCM::DefinitionCode</b>	NL-CM:19.4.6

<b>DCM::ReferencedDefinitionCode</b>	NL-CM:14.2.9	This is a reference to concept VerpleegkundigeActie in information model VerpleegkundigeInterventie.
<b>Options</b>		

<b>«document»</b>	<b>BrandwondAnatomischeLocatieCodelijst</b>	
<b>Alias</b>		
<b>Definition</b>		
<b>Datatype</b>		
<b>Options</b>		
<b>BrandwondAnatomischeLocatieCodelijst</b>	<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.4.2</b>	
<b>Codes</b>	<b>Coding Syst. Name</b>	<b>Coding System OID</b>
SNOMED CT: <<91723000   anatomical structure	SNOMED CT	2.16.840.1.113883.6.96

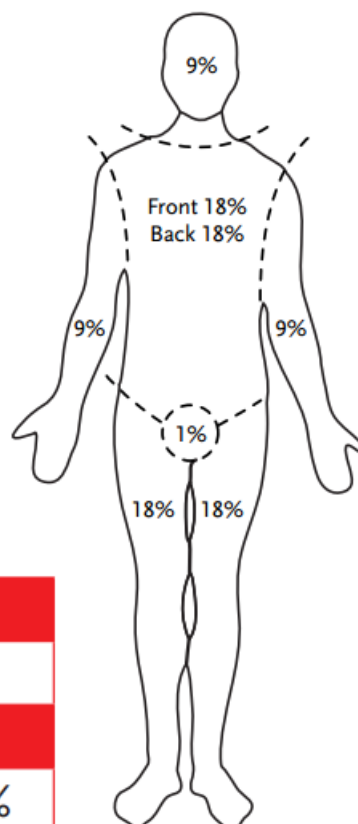
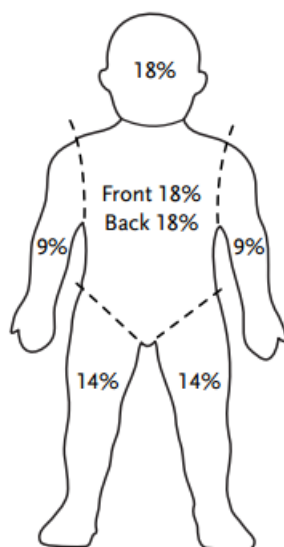
<b>«document»</b>	<b>DieptegraadCodelijst</b>			
<b>Alias</b>				
<b>Definition</b>				
<b>Datatype</b>				
<b>Options</b>				
<b>DieptegraadCodelijst</b>	<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.4.1</b>			
<b>Concept Name</b>	<b>Concept Code</b>	<b>CodeSys. Name</b>	<b>CodeSystem OID</b>	<b>Description</b>
first degree burn injury	77140003	SNOMED CT	2.16.840.1.113883.6.96	1 <sup>e</sup> graad
superficial partial thickness burn	46541008	SNOMED CT	2.16.840.1.113883.6.96	2 <sup>e</sup> graad, oppervlakkig
deep partial thickness burn	262588000	SNOMED CT	2.16.840.1.113883.6.96	2 <sup>e</sup> graad, diep
third degree burn injury	80247002	SNOMED CT	2.16.840.1.113883.6.96	3 <sup>e</sup> graad

## 1.8 Example Instances

Brandwond	
Dieptegraad	2 <sup>e</sup> graad, oppervlakkig
Uitgebreidheid	1%
AnatomischeLocatie	onderarm rechts
OntstaansDatum	29-09-2014
DatumLaatste Verbandwissel	10-10-2014
Behandeling	
Activiteit	Verbinden met hydrofyber verband, dagelijkse wondinspectie, zo nodig verwisselen van niet adherente delen van hydrofyber verband.
Toelichting	Mevrouw kreeg hete thee over zich heen, wond is ongeveer 10 bij 4 cm.

## 1.9 Instructions

### TVLO kinderen TVLO volwassenen



1 jaar oud	
hoofd: 18%	been: 14%
Per jaar ouder dan 1	
hoofd: - 1%	been: + 1/2%

[www.brandwondenstichting.nl](http://www.brandwondenstichting.nl)

## 1.10 Interpretation



## 1.11 Care Process

## 1.12 Example of the Instrument

## 1.13 Constraints

## 1.14 Issues

Damages to the skin as a result of exposure to intense heat and cold can lead to similar wounds. Nevertheless, we have decided not to expand the building block to become a generic thermal wound building block. The reason for this was the lack of a guideline for treating freeze wounds and insufficient agreement in the field on the applicability of the burn wound classification for freeze wounds. Freeze wounds also rarely occur in the Netherlands, due to the climate.

## 1.15 References

1. Brandwondenprotocol 2010 [Online] Beschikbaar op: [https://www.rkz.nl/brandwondenprotocol\\_online](https://www.rkz.nl/brandwondenprotocol_online)  
[Geraadpleegd: 13 februari 2015]
2. Brandwonden genezen. Hoe verder? [Online] Beschikbaar op:  
[http://brandwondenstichting.nl/wp-content/uploads/2013/08/NBS\\_Hoe-verder-huisartsen-2011.pdf](http://brandwondenstichting.nl/wp-content/uploads/2013/08/NBS_Hoe-verder-huisartsen-2011.pdf)  
[Geraadpleegd: 13 februari 2015]

## 1.16 Functional Model

## 1.17 Traceability to other Standards

## 1.18 Disclaimer

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