

CRANE Database – Developmental Defects of Enamel (DDE) data entry

Prepared by the CRANE Database Project Team

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The CRANE Database system allows the collection of dental health outcome information for patients registered in the CRANE Database; who have given explicit consent¹ for collection of their outcome data.

1. Dental health outcome data collection up until May 2022

Up until May 2022, Paediatric dental health outcome information was captured in the form of decayed, missing or filled teeth (dmft) data at 5 years of age and DMFT at 10 years of age:

- **Figure 1** (right) shows the data items collected as part of dmft data collection at 5 years of age – as per the CRANE Data Collection Form on outcomes (Form 2).²
- The five data items included date record taken, a total score for dmft and a breakdown of the three component scores.

Paediatric dental health data items were available to complete, in the 'Outcomes at 5 years' and 'Outcomes at 10 years' sections of the CRANE Database, for children turning 5 and 10 years old (respectively).

- If the five dmft data items were not recorded in the 'Outcomes at 5 or 10 years' section, a 'Reason outcome not collected' was completed (as shown, right).

Figure 1. Paediatric dental health outcome data collection up until May 2022 – at age 5 and 10

Date record taken	/ /
	(DD / MM / YYYY)
Total number of decayed, missing or filled teeth in primary dentition (dmft)	<input type="text"/> <input type="text"/> (if none, specify 0)
Total number of decayed teeth in primary dentition (dt)	<input type="text"/> <input type="text"/> (if none, specify 0)
Total number of missing teeth in primary dentition (mt)	<input type="text"/> <input type="text"/> (if none, specify 0)
Total number of filled teeth in primary dentition (ft)	<input type="text"/> <input type="text"/> (if none, specify 0)
Reason outcome not collected	
<input type="checkbox"/>	Patient deceased or emigrated
<input type="checkbox"/>	Patient transferred in or out of area
<input type="checkbox"/>	Syndromic Diagnosis
<input type="checkbox"/>	Clinically contraindicated (other than syndromic) – this record type for this patient. Reason details:
<input type="checkbox"/>	Lack of staff/ facilities/ equipment
<input type="checkbox"/>	Patient DNA/ cancelled/ did not consent/ cooperate
<input type="checkbox"/>	Other reason. Details:

2. Dental health outcome data collection from May 2022 – includes DDE as well as dmft / DMFT data

The CRANE Database system continues to collect the dmft / DMFT data items detailed above, as well as new Developmental Defects of Enamel outcomes (DDE) data – as per **Figure 2** below showing how this appears in the CRANE Data Collection Form on outcomes (Form 2).³ This information is now collected in two sub-sections of the CRANE Database, '3a Dentistry dmft' and '3b Dentistry DDE'. These sub-sections are

¹ <https://www.crane-database.org.uk/resources/information-leaflets-and-parental-consent-forms/>

² An updated version is available to download online <https://www.crane-database.org.uk/resources/crane-data-dictionary/>

³ An updated version is available to download online <https://www.crane-database.org.uk/resources/crane-data-dictionary/>

found within the ‘Outcome at 5 years’ and the ‘Outcome at 10 years’ Outcome tabs. Also, as possible previously, if dental health data is not available, a ‘Reason outcome not collected’ can be completed at both 5 and 10 years of age.

Total dmft score is now automatically calculated based on the individual element scores (dt+mt+ft) (since December 2023).

Figure 2. Dental health data collection from May 2022 – at age 5 and 10*

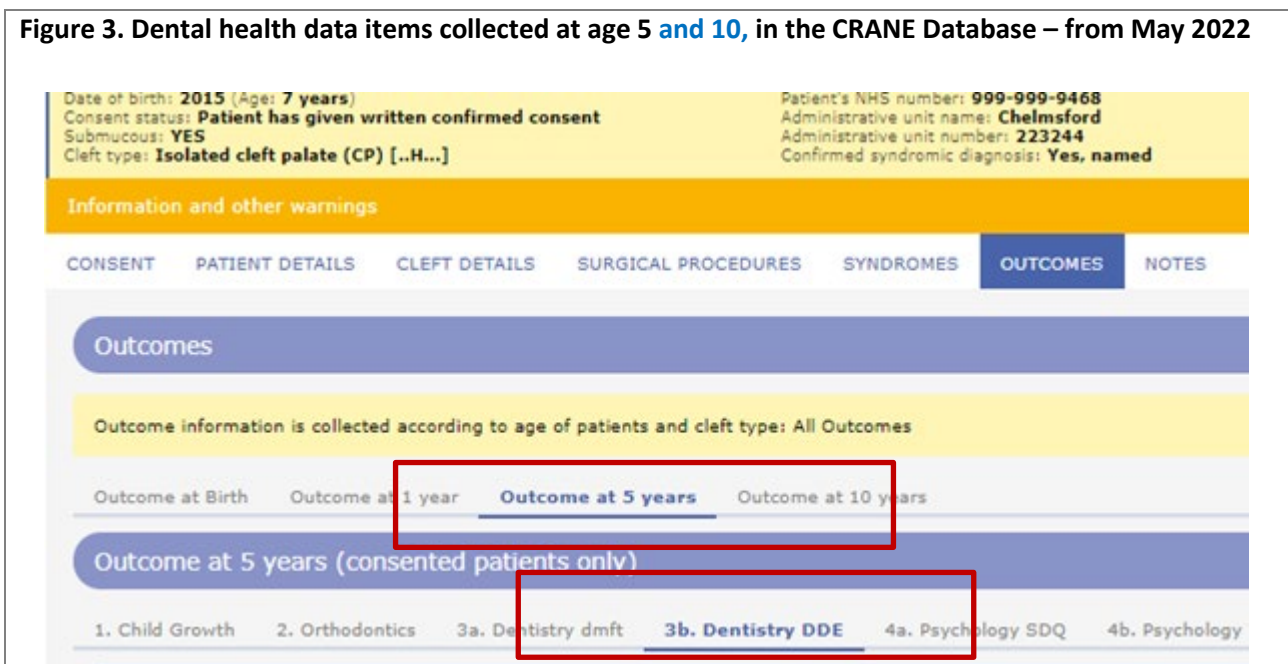
<p>Date decayed, missing and filled teeth (DMFT) record taken / / (DD / MM / YYYY)</p> <p>Total number of <u>decayed</u> teeth in permanent dentition (DT) <input type="text"/> <input type="text"/> (if none, specify 0)</p> <p>Total number of <u>missing</u> teeth in permanent dentition (MT) <input type="text"/> <input type="text"/> (if none, specify 0)</p> <p>Total number of <u>filled</u> teeth in permanent dentition (FT) <input type="text"/> <input type="text"/> (if none, specify 0)</p> <p>Total number of <u>decayed, missing or filled</u> teeth in primary dentition (dmft)* <input type="text"/> <input type="text"/> (if none, specify 0)</p> <p>*Note: Total DMFT score is automatically calculated in CRANE system from DT, MT, and FT scores. Please record above to confirm correct total.</p>	<p>Developmental Defects of Enamel (DDE) Select one option for each dental region:</p> <table border="1"> <thead> <tr> <th></th> <th>SN(R)</th> <th>UR2</th> <th>UR1</th> <th>UL1</th> <th>UL2</th> <th>SN(L)</th> </tr> </thead> <tbody> <tr> <td>Normal</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Hypomineralisation</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Hypoplasia</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Abnormal shape/size</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Congenitally missing</td> <td></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> </tr> <tr> <td>Unable-restored</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Unable-carious</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Unable-extracted</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Not present</td> <td><input type="checkbox"/></td> <td></td> <td></td> <td></td> <td></td> <td><input type="checkbox"/></td> </tr> <tr> <td>DDE subtotal</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <p>Total DDE score** <input type="text"/></p> <p>Date DDE record taken / / (DD / MM / YYYY)</p> <p>**Note: Total DDE score is automatically calculated in CRANE system from sub-scores. Please record above to confirm correct total.</p>		SN(R)	UR2	UR1	UL1	UL2	SN(L)	Normal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hypomineralisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hypoplasia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Abnormal shape/size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Congenitally missing		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Unable-restored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unable-carious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unable-extracted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not present	<input type="checkbox"/>					<input type="checkbox"/>	DDE subtotal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Note: The presence of a ‘Normal’ supernumerary will result in a score of one, due to the treatment need, not zero as for other ‘Normal’ DDE scores.

*Please note: The ‘congenitally missing’ option is not available for completion for SN(R)/SN(L) at 10 years of age, and the ‘unable – exfoliated’ option is not available for any dental region at 10 years of age.

Figure 3 shows how the new DDE data collection section at 5 years of age appears in the CRANE Database.

Figure 3. Dental health data items collected at age 5 and 10, in the CRANE Database – from May 2022



Figures 4 and 5 show how the new DDE data collection matrix, at 5 years of age, as well as the reasons outcome not collected, appear in the CRANE Database.

Figure 4. DDE data items collected at age 5 and 10* in the CRANE Database – from May 2022

*Please note: The ‘congenitally missing’ option is not available for completion for SN(R)/SN(L) at 10 years of age, and the ‘unable – exfoliated’ option is not available for any dental region at 10 years of age

Figure 5. Reasons outcome not collected – for dental health data item at age 5 and 10, in the CRANE Database

Updated versions of the **CRANE Data Dictionary**, as well as the **CRANE Data Collection Form** on outcomes (Form 2), are available to download <https://www.crane-database.org.uk/resources/crane-data-dictionary/>

3. Importing and exporting dental health outcome data

- If you use “Import Templates” to upload your data – as per the CRANE Import Guide found online <https://www.crane-database.org.uk/resources/quick-reference-for-importing/> – new templates for dmft / DMFT, DDE and ‘reasons outcomes not collected’ combined are now available for use.
- Also, dmft / DMFT, DDE and ‘reasons outcomes not collected’ are now exported in one combined file <https://www.crane-database.org.uk/resources/quick-reference-for-exporting/>

Thank you very much for your work with the CRANE Database.

If you have any questions about this User Guide, or wish to provide us with any feedback on this document, please contact us on 020 7869 6610 or crane@rcseng.ac.uk.