Public Health England

Protecting and improving the nation's health

Dental public health epidemiology programme

Oral health survey of five-year-old children 2016–17

National protocol

Version 1

This protocol aligns with the British Association for the Study of Community Dentistry (BASCD) diagnostic criteria for caries prevalence surveys and guidance on sampling for surveys of child dental health.

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

Public Health England
133-155 Waterloo Road
Wellington House
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

For queries relating to this document, please contact: Dr Gill Davies, gill.davies@phe.gov.uk

Published: August 2016
PHE publications gateway number: 2016226

Contents

1. Introduction

Local authorities have been responsible for gathering information on the health needs of their local populations since April 2013, following the white paper, Equity and Excellence; Liberating the NHS.[1] This imperative is described in the Health and Social Care Act 2012, underpinned by Statutory Instrument 2012 number 3094,[2] and Commissioning Better Oral Health.[3]

Leadership and structures supporting the former NHS Dental Epidemiology Programme transferred into Public Health England (PHE) on 1 April 2013. The transformation of the programme within PHE is almost complete and some terms have, of necessity been changed. This protocol has been produced during the transition phase and best descriptive terms available at that time are used.

The population group for scrutiny for the academic year 2016-17 will be five-year-olds attending mainstream schools. Biannual surveys of this age group provide an insight into dental health and associated child rearing practices at a key life stage. The findings will allow local authorities to monitor this age group, which has a public health outcomes framework (PHOF) indicator and is reported as an item on the Single Data List.

Additionally, for this survey, the opportunity is being taken to find out what relationships there are, if any, between caries levels in individual children and their height and weight. This should fill the knowledge gap, highlighted by the PHE review in 2015, which showed that stronger evidence is required to establish the nature of the association between the two factors.[4]

This protocol provides a description of the standardised methods that fieldwork teams should use when undertaking this survey.

2. Aim of the survey

The aim of the survey is to measure the prevalence and severity of dental caries among five-year-old children within each lower-tier local authority. This will provide information for local authorities, the NHS and other partners and highlight inequalities.

This information can be used to:

2.1 Enable local authorities to meet their responsibilities with regard to health needs assessments.

2.2 Inform part of a health needs assessment, particularly joint strategic needs assessments.

2.3 Provide comparisons with children of the same age in previous years (2008, 2012 and 2015) to permit monitoring of the PHOF measure.

2.4 Inform the local oral health improvement strategy.

2.5 Provide standardised information for comparison locally, regionally, between countries of the UK and internationally

2.6 Allow investigation of any relationships between levels of dental decay and height and weight measures using data on all individuals for whom linkage can be made.

3. Objectives

To examine five-year-old children using caries diagnostic criteria and examination techniques based on those agreed by the British Association for the Study of Community Dentistry (BASCD), diagnostic criteria for caries prevalence surveys[5] and using BASCD-recommended sampling procedures described in BASCD guidance on sampling for surveys of child dental health.[6]

4. Sample

The primary sampling unit will be local authority boundaries at unitary, metropolitan borough or lower-tier level, as has been the case in all recent surveys of this population group.

4.1 Survey population

The survey population is defined as all those children attending state-funded primary schools of all classifications within the local authority who have reached the age of five, but have not had their sixth birthday on the date of examination (excluding special schools). See box 7.9.

Age eligible children will have dates of birth that fall within the widest range of dates of birth, September 2010 to June 2012. (See Appendix K, which also helps to identify the narrower ranges for examination dates in each month).

A minimum sample size of 250 examined children is required per lower-tier local authority, from a minimum of 20 schools. This is unlikely to produce a sufficiently large sample to facilitate local planning for many areas, in which case larger samples will be required. Where larger samples are drawn, the children selected may need to be coded to allow a weighted estimate of local authority mean to be produced, where necessary. Details of these requirements and the need for local stratification will be determined by

local authorities with advice from consultants in dental public health (CsDPH) in PHE Centres or other advisers in dental public health to local authorities, in liaison with dental managers/directors of the agencies undertaking the surveys.

PHE dental epidemiology co-ordinators (DECs) must be informed of proposed sampling methods so that they can confirm their validity, before the survey commences.

4.2 Sampling procedure

Discussion is required between local authority commissioners and CsDPH in PHE Centres to establish the size and type of sample that is required to meet local needs, for example commissioning consortia, within an area may each require an enhanced sample. Once this has been agreed the fieldwork team can undertake the sampling process.

Detailed guidance on the required stratified sampling procedures is given in *British Association for the Study of Community Dentistry (BASCD) guidance on sampling for surveys of child dental health. A BASCD co-ordinated dental epidemiology programme quality standard* (Pine *et al*., 1997a).[7] Guidance is provided in the 'Step by step sampling guide' available from http://www.nwph.net/dentalhealth/. Advice can also be requested from the DEC and from Girvan Burnside (g.burnside@liv.ac.uk).

Lists of all state maintained primary schools within each local authority area, and the numbers of pupils attending each, will be required as the first stage in the sampling process.

Special schools should not be included in the main sampling frame or main local authority survey file.

In most local authority areas a two-stage sampling procedure will be required for surveys of five-year-old children as there are normally more than 20 primary schools covering the local child population.

A stratified sampling method, which takes school size into account, is described in the guidance. The school size bandings and sampling intensity described are guidance only. It may be necessary to alter these to produce suitable numbers of children from whom to seek consent. For example, schools could be divided into those with fewer than 30 children aged five and those with 30 or more. All of the children in the smaller school would be sampled, while one in two or one in three of the larger ones would be sampled. Regardless of the selected size bandings and intensities, it is still essential to calculate the correct proportions of children to be selected from small and large schools in order to ensure the sample is representative of the distribution in the overall population. This is the normal process for the sampling techniques used in previous surveys. Four tables need to be constructed showing how the sample will be structured and copies of these, together with details of the sampling methodology, must be sent to

the DEC in your area for agreement before any schools are contacted or children selected.

Whilst sampling, it is advisable to sample one or two schools extra within each size band. These can then be used as substitutes in case other schools refuse to take part or cannot take part due to unexpected problems. Neither schools nor children should be substituted to compensate for children who do not return explicit, positive consent letters. This would result in a sample which may be larger but would be biased. Effort should be directed towards encouraging and supporting high proportions of parents to return the consent forms.

Efficient methods for sampling to provide ward level estimates are available and in many cases are far preferable to undertaking all-school, all-children surveys. Details should be sought from the DEC in your area.

Contact details of dental epidemiology co-ordinators

PHE centre	Name of DEC	Email address
North West	Gill Davies	gill.davies@phe.gov.uk
North East	Kamini Shah	kamini.shah@phe.gov.uk
Yorkshire and The Humber	Kate Jones	kate.jones@phe.gov.uk
West Midlands	Anna Hunt	anna.hunt@phe.gov.uk annahunt@nhs.net
East Midlands	Sandra Whiston	sandra.whiston@phe.gov.uk
East of England	Linda Hillman	linda.hillman@phe.gov.uk
South West	Paul Harwood	paul.harwood@phe.gov.uk
South East	Anna Ireland	anna.ireland@nhs.net anna.ireland@phe.gov.uk
London	Desmond Wright (interim)	desmond.wright@phe.gov.uk

5. Consent

Explicit consent is required following the guidance by the Department of Health (Appendix D).

It is advised that 300 children be randomly selected and consent sought from all if a minimum sample of 250 examined is the target. All consented children should then be examined even though this may mean a sample of fewer than 250 in some cases. It is recognised that as the proportion of explicit, positive consenters reduces, the representativeness of the sample also reduces.

The procedure for obtaining explicit, positive consent must involve:

- giving parents an invitation letter which gives clear information explaining the nature and purpose of dental surveys in broad terms and simple language (example given in Appendix C)

- provision of a form which reports parental consent or refusal for the survey, indicates that parents have read and understood the information letter and includes a signature and a date of this (attached form given in Appendix L)

- distribution of a second letter with consent form, ideally on differently coloured paper, to those who do not respond to the first

- acceptance of, and respect for, the decision of a parent or a child to decline an examination

In a few instances arrangements exist whereby core consent agreement for all health surveillance is provided for the whole of school life. Where this includes dental examination or checks, this can be regarded as sufficient consent. However, letters should also be provided for parents prior to the survey that describe the purpose and nature of the survey (see Appendix L i).

In an increasing number of schools, parents are asked to provide consent for a range of activities for the forthcoming year or term. It is acceptable for consent for this survey to be included in this block consent session if an invitation letter is provided. An additional appendix (L ii) provides suggested wording that can be included in the school block consent system.

It may help school staff to encourage returns if class lists are provided that show which children have been sent consent letters and a column for them to record which ones have returned them (Appendix M).

It is important that all efforts are made to maximise the proportion of consent forms that are returned from parents. Please see Appendix N, which gives details of a range of approaches that fieldwork teams and local authority partners can take.

Various strategies may be necessary to maximise the number of consent forms returned. These include:

- identifying schools where consent return is known to be poor and providing additional support

- recruiting a named person at a school who can speak with parents and follow up when forms are not forthcoming. This might be the school nurse, family liaison worker, pastoral care worker, classroom assistant or parent volunteer

- giving parents prior warning of the survey and seeking their support via posters, an insertion in the newsletter, postcards or attendance at parents' evening

- posting letters and consents to home addresses with stamped, addressed envelopes for return

- handing letters and consent forms directly to parents at pick up time

Coercion to provide positive consent should not be used and would make the process illegal.

The support of the PHE director of dental public health will be shown in a letter to directors of public health (Appendix B). This can be used to seek the support of headteachers and expedite co-operation with schools.

Fieldwork teams must keep a record of the number of all children approached, the numbers with parental consent, parental refusal and no consent (Appendix Pi or Pii), so that the form in Appendix P can be completed and submitted along with data files.

6. Personnel

6.1 The overall responsibility for planning this survey and quality assuring the resulting products lies with PHE via the national lead for dental public health epidemiology and the dental public health epidemiology team.

Responsibility for ensuring co-ordination and facilitation of the application of quality standards lies with the DECs.

The commissioning of the surveys will be the responsibility of the local authorities in partnership with NHS England dental commissioning teams based in NHS England area teams.

Delivery of the fieldwork to agreed national standards lies with the commissioned fieldwork teams.

6.2 Fieldwork for the survey will be carried out by services commissioned by the local authority, sometimes in partnership with NHS England. The dental examinations will be carried out by registered dental clinicians who will be trained to national standards by the regional standard examiners/trainers, using the approved BASCD training pack, to

ensure that they are familiar with the examination method and criteria. Examiners must be calibrated annually following BASCD guidance on the statistical aspects of training and calibration of examiners for surveys of child dental health.[7] Examiners who do not conform to the accepted diagnostic standards will need to be retrained and recalibrated, or replaced. In this instance, training and calibration will be provided for five-year olds for all examiners.

6.2.1 Where a therapist or hygienist will be carrying out examinations the Lead Investigator – Sandra White (Sandra.white@phe.gov.uk) – should be notified to ensure correct procedures are implemented.

If a therapist or hygienist is undertaking the examinations, or if there is no intention to provide information about a child's clinical status, then the consent letter (Appendix M) should be modified to reflect this.

6.3 It is good practice for two support workers to accompany the examining dental clinician. One worker is required to record the codes that the examiner provides and the other will help support the process by liaising with staff, fetching the children, assisting with examination and encouraging co-operation.

6.4 Criminal Records Bureau or Disclosure and Barring Service certificates may be requested by schools. All members of the fieldwork teams will need to have up-to-date versions of these to hand in such cases.

6.5 Fieldwork personnel should have up-to-date training in data protection and other, relevant, information governance issues.

7. General conduct of the survey

An overview of the survey is shown in plan form in Appendix E.

7.1 The planning and organisation of the survey will be carried out by commissioned fieldwork teams (typically from the CDS) who will liaise with local authorities, headteachers and governing bodies of the schools. Reference to the Statutory Instrument 2012 No 3094 (Appendix A) [and the letter from the director of dental public health (Appendix B)] should be made if difficulties are encountered.

Fieldwork teams will contact the local authority education department to obtain lists of all state-funded primary schools within the area who educate five-year-olds, including community schools, academies, foundation schools and free schools.

7.2 Following random sampling, the headteachers of the selected schools will be contacted. The aims and objectives of the survey will be explained and the co-

operation of the headteachers sought. Dates for examination will be set at a mutually convenient time and date with relevant staff members at each school.

A summarised explanation (Appendix C) is provided which may be used as a letter or a fax to give schools more detail about the purpose and nature of the survey. It also shows that the request for co-operation comes from a formal, legitimate NHS source.

7.3 Class lists of all age eligible children to be included in the survey will be obtained prior to the examination. These lists should include the following information: name, date of birth, residential postcode and ethnicity.

7.4 Using class lists, children who will be age eligible on the planned day of examination will be identified (see Appendix K) and sampling of the appropriate intensity carried out (see section 4.2). A list of these sampled children, along with their home postcodes will be formed into a table.

7.5 A letter will then be sent to each selected child's parent or guardian outlining the details of the survey and informing them that their child may be included, and seeking their consent (Appendix L).

A second letter will be distributed to those who have not returned a form from the first drop.

If a therapist or hygienist is undertaking the examinations, or if there is no intention to provide information about a child's clinical status, then the consent letter (Appendix M) should be modified to reflect this.

7.5.1 In local authorities where arrangements are in place to collect core agreement for all health surveillance, the parents of consented children should only be sent a letter informing them of the nature and purpose of the forthcoming survey (see Appendices Li to Lii).

7.6 The provision or withholding of consent or non-return of valid consent forms will be recorded for each child, firstly into the sheet for schools suggested in appendix M and, finally, entered into the overview table, which can be used as an examination day sheet (Appendix Pi or Pii).

7.7 The dental examinations will take place in school in a situation identified as being suitable for that purpose and convenient for the smooth running of both the survey and the school.

7.8 It is good practice to double check the examination sheet to identify clearly those children for whom consent has been provided. Children whose parents have

not returned a consent form or those have ticked the box on the form showing that they do not want their child included must not be examined.

7.9 It is good practice to inform parents/guardians if a clinical condition requiring closer investigation is seen during examination, for example sepsis or caries in permanent teeth. If detailed feedback is provided for parents it should be couched in terms that respect any existing patient-clinician relationships. If there is no intention to provide this information, the consent letter (Appendix L to Lii) should be modified to reflect this.

It is permissible to sample five-year-old children from Year 1 children only, in surveys which are fully completed by the last day before the February 2017 half term holiday. This should result in a sample of children with an average age of 5.5 years. In these circumstances care should be applied when proposing the sampling method for approval by the DEC.

8. Fieldwork

Examinations will take place in the schools, starting immediately after training and calibration of examiners and must be completed by the end of June 2017. This gives sufficient time for checking and cleaning of data, summing of numbers of children identified, those consented and not consented, numbers examined and reporting of these.

Equipment, instruments and materials

To ensure standardisation, no mobile surgeries or equivalent should be used.

8.1 A table with a mat or suitable fully reclining chair will be used for examination, with the examiner seated behind the child. If a reclining chair is used, an assessment should be made of the safety of it for both the examiner and the volunteer. Some chairs can tip backwards as smaller children move upwards in them if there is no support underneath.

8.2 An inspection light yielding approximately 4,000 lux at one metre will be used for illumination. (A Daray X100 with **Halogen bulb** with PivotD desk mount or a Brandon Medical MT608BASCD are suitable if a replacement is needed. DO NOT use a lamp with an LED bulb). If using the Daray Versatile, it should be set to the brighter of the two settings. A spare halogen bulb will be carried in case of failure. Daray lamps must be firmly secured to a rigid surface before use and the attachment mechanism correctly orientated to ensure it cannot topple over (see Appendix G).

8.3 The instruments required for the caries examination will include No.4 plain mouth mirrors, ball ended CPITN probes or blunt or ball ended probes (0.5mm). Mirror heads will be replaced when they become scratched or otherwise damaged.

The attachment of the mirror head to the stem and the stem to the handle should be checked for security.

8.4 Local policies and arrangements will be applied to maintain infection control and avoidance of allergic reactions to latex and glove powder. A fresh set of autoclaved instruments and a new pair of examination gloves will be used for each volunteer.

8.5 Cotton wool rolls, cotton buds, or pledgets of cotton wool will be used to clear teeth of debris and moisture.

8.6 Suitable shaded spectacles will be used to protect the volunteer's eyes from the light and accidental contact.

8.7 Data may be entered either onto paper record sheets (Appendix O) or directly onto computer, with safeguards for both methods (see 9.3 and 9.4).

9. Collection of data – general information

9.1 Training and calibration

Trained and calibrated dental clinicians, assisted by appropriately trained assistants, will undertake the collection and recording of non-clinical and clinical data. Evidence of intra-examiner reproducibility is desirable for local use – brief guidance is given in Pine et al.[7]

9.2 Computer software

9.2.1 Clinical and non-clinical survey data

Data should be collected using the Access data collection tool with a specific format for this survey this can be downloaded from www.nwph.net/dentalhealth [5yr 2017 Data Collection.accdb].

Dental SurveyPlus 2 can still be used, with the Dental Public Health Epidemiology Programme (DPH EP) format [5YR2017] using the Dental SurveyPlus 2 (DSP2) version 2.1 release 3, although this is now discouraged. The format is available electronically from: www.nwph.net/dentalhealth under the relevant survey link.

The format contains several free fields for local use at the end. These can be modified for local use by amending the label, but NOT the field name, using the formatter. If these are insufficient for local information requirements it is requested that additional fields are added to the end of the national format.

Newer computers and upgraded ones using Windows 7 or later are incompatible with DSP2 unless a 'patch' is applied. A machine with Windows 6 or earlier should be kept aside to allow data entry and analysis of data in DSP2. The details of the patch are given at appendix I for IT staff. It is strongly recommended that the Access data collection tool is used instead of DSP2.

9.2.2 Information to allow identification of NHS numbers

Appendix Pii will be available in Excel format, with a password protection feature. All teams will complete this table according to the guidance given in 10.1.

9.3 Confidentiality

Fieldwork teams will ensure that all data is handled with full regard to confidentiality and the data protection legislation. Access to all data files will be controlled and protected by passwords. This must also apply to the Excel datasheets from Appendix Pii.

Fieldwork teams will only retain anonymous processed data files for purposes of further analysis. As personal data processed for purposes of research and statistics falls within the scope of the Act (but may be exempt from subject access) each provider team will register their data collection according to local procedures.

9.4 Security

Where data are recorded directly onto computers a back-up copy will be made every day and stored separately from the main database.

If data are collected onto paper sheets in the field, transfer onto computer will occur with the minimum of delay. It is good practice for data to be entered on the same day as examination takes place. Paper copies will be kept securely and distant from the electronic database when inputting is not occurring. These should be retained and destroyed according to local protocols.

9.5 File management

Files should be labelled to indicate the population group to which they refer. It is insufficient to simply label files with the age group and year of survey. The name of the local authority is required, according to the guidance.

Survey files should be saved into the 'Survey' folder of DSP2.

Data handling guidance instructions on the checking, cleaning and labelling of data files will be available from: www.nwph.net/dentalhealth

9.6 File transfer

Data files will only be transferred on disk or stick by hand delivery from the fieldwork team to the DEC or by sending as an email attachment from an nhs.net address to the DEC's nhs.net address.

10. Collection of non-clinical data

10.1 Recording of information to allow data linkage[8]

The PHE DPH Intelligence team intends to use the data from this year's survey to investigate any associations between caries and height and weight. In order to link caries information at individual level from the central dataset with height and weight data from another, remote database, it is essential that a list is formed of all children with their survey unique ID number (as formed in 10.6 below), their first and second names, data of birth (dd/mm/yyyy) and postcode. This information will be kept separate from the caries data and only linked with height and weight data using anonymised methods.

All fieldwork teams should complete Appendix Pii to provide these details for all children they examine. It may be easier to use Pii, which is an Excel file, from the outset instead of Pi and then remove the columns suggested and all children who were not examined.

Pii is a password-protected workbook. When you try to open it, you will be asked for a password. This password will be sent to fieldwork teams by the DECs. The word should start with a capital E and have no punctuation or spaces.

10.2 Other non-clinical information

10.2.1 Organisational boundary coding

The clinical data collection sheet for each child examined requires entry of the name of the lower-tier local authority within which the school is sited. This is defined by the geographical position of the school within local authority boundaries. This should be clear, as the local authority will have provided lists of the schools they cover. A table of names for lower-tier local authorities is provided in Appendix J.

10.2.2 Examiner
A name or code must be used to identify the examiner.

10.2.3 Examination date
The date of the examination will be recorded.

10.2.4 School name and postcode
The school name and postcode will be entered. Care must be taken to record each school with a single method of spelling and punctuation to avoid erroneously creating schools which the computer programme recognises as distinct. For example, a single school recorded as St Mary's in five records and St. Marys in ten others will appear to be two schools when the central computer checks entries.

10.2.5 Child identity number
A unique identity number must be entered for each child, which consists of a prefix from the lower-tier local authority code and a suffix, which numbers participants from class lists. The list of lower-tier local authority codes is given the fourth column in Appendix J

For example, the third child to be sampled in Aylesbury Vale would have the following ID number:

Lower-tier local authority code									Number of sampled child			
E	0	7	0	0	0	0	0	4	0	0	0	3

The 250th child to be sampled in Aylesbury Vale would have the following ID number:

Lower-tier local authority code									Number of sampled child			
E	0	7	0	0	0	0	0	4	0	2	5	0

The use of identity numbers instead of names improves anonymity of the data and should reduce the chance of duplicate data entries.

10.2.6 Date of birth
Full dates of birth are required to enable sampling from class lists and these are also required to allow linkage to the height and weight data so this information should be recorded on form Pii.

However, use of just the month and year of birth increases anonymity for purposes of recording on the clinical data collection sheet. So all children will be recorded onto these and onto the computer data collection system as being born on the 15th of the month. The Access and DSP2 data collection systems will automatically indicate when a child

is possibly too old or too young for inclusion. In these cases, a double check should be run on the actual date of birth to ensure that they are in fact five years old on the day of examination.

Age eligible children will have dates of birth that fall within the widest range of dates of birth September 2010 to June 2012 (see Appendix K, which also helps to identify the narrower ranges for examination dates in each month).

10.2.7 Home address postcode

Home postcodes will be recorded for all children for whom parental consent is provided. This should be sought from the school or, in the rare instances when this is refused, lists from child health databases can be requested.

Note that computer programmes can only read postcodes if they are entered in the correct format (A = alphabetic N = numeric): Formats example:

AN NAA	M6 5CQ
ANN NAA	M25 7GH
AAN NAA	BB3 4RL
AANN NAA	SK15 8PY

Postcodes should be entered with the first part (outward code) in the first box and the second part (inward code) in the second box, no spaces, in both the Access or DSP2 survey data collection programmes and also into the Excel password protected workbook, Appendix Pii.

The most common data entry faults are the substitution of the letters I and O for the numbers 1 and 0.

10.2.8 Sub-group

To facilitate the identification of samples that are taken in addition to the minimum requirement, coding is required to assist in the local calculation of weighted means. For example, if an additional sample is required for an area of particular concern, it is easier if children sampled for this purpose are identifiable. This allows for deeper local analysis. It is therefore necessary to code these children.

All ‘additional’ samples, if used, should be defined locally and descriptions communicated to DECs.

The coding to assist with identification of sample types is as follows:

0 Main sample
1 Additional sample A
2 Additional sample B
3 Additional sample C
4 Additional sample D

5 Additional sample E

10.2.9 Examination status

The type of examination will be recorded as follows:

0 Examined
1 Repeat examination for intra-examiner reliability
2 Training examination
3 Child absent
4 Child refused examination

10.2.10 Variable for ethnic code

Subjects will be coded for ethnic origin to ensure the requirements of the Health and Social Care Act, 2012. This act "…introduced the first specific legal duties on health inequalities, including duties on the Secretary of State for Health. All staff undertaking NHS and public health functions on behalf of the Secretary of State are responsible for ensuring compliance with these duties and this guidance is designed to help you do so." This would include a requirement to collect ethnicity data to be able to report any inequalities measured in dental health.

phenet.phe.gov.uk/Our-Organisation/Directorates/Health-and-Wellbeing/Documents/Reducing%20health%20inequalities%20and%20equality%20act%2027%20March.pdf

The best method is to use the ethnicity data schools collect from parents for the purposes of completing the school census:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/522546/2016_to_2017_School_Census_Guide_V1_0.pdf

https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2016

The coding method should not vary, as there is now a standard method of categorisation and coding for Education Skills and Children's Services (ESCS). The ethnicity code set reflects categories used in the 2001 national population census, with additional categories. These are suitable for alignment into the 2011 Census groupings, which are:

Higher ethnicity code	Higher ethnicity description	Lower ethnicity code	Lower ethnicity description
A	White	1	British
		2	Irish
		3	Gypsy or Irish traveller
		4	Roma
		5	Any other white background
B	Mixed	21	White and black Caribbean
		22	White and black African
		23	White Asian
		24	Any other mixed background
C	Asian or Asian British	41	Indian
		42	Pakistani
		43	Bangladeshi
		44	Any other Asian background
D	Black or black British	61	Black Caribbean
		62	Black African
		63	Any other black background
E	Other ethnic group	81	Chinese
		86	Any other ethnic group
F	Other ethnic group – locally defined	I	Ethnic group not provided
G	Other ethnic group – locally defined	I	Ethnic group not provided
H	Other ethnic group – locally defined	I	Ethnic group not provided
I	Information on ethnic group not provided	I	Ethnic group not provided

Children can only be classified at a lower ethnicity descriptor from the list given for their higher level descriptor.

The penultimate three groups may be defined for local use and should allow for particular additional ethnic groups not listed in the table above.

Further guidance and descriptions of ethnic groupings can be found from https://www.gov.uk/guidance/school-census

11. Collection of clinical data

Subjects will be examined lying down on a table with a mat or in a suitable chair that reclines to fully supine. The examiner will be seated behind the subject. The examination will be visual, aided by mouth mirrors and the standardised light source only as described in 8.2.

The teeth will not be brushed, but may be rinsed prior to the dental examination. Where visibility is obscured, debris or moisture should be removed gently from individual sites with gauze, cotton wool rolls or cotton wool buds. Compressed air should not be used, in the interests of comparability and cross-infection.

Probes must only be used for cleaning debris from the tooth surfaces to enable satisfactory visual examination and for defining fissure sealants as indicated below (11.8). Radiographic or Fibre-optic transillumination examination will not be undertaken.

Only the primary teeth will be recorded for this survey of five-year-old children.

11.1 Oral cleanliness: assessment of plaque

It is of interest for local surveys to include a variable about oral cleanliness because this provides a proxy for tooth-brushing activity and likely exposure to fluoride toothpaste. A simple measure based on a modification of the Silness and Low Index[9] will be used. A probe is not used for this part of the examination, which involves visual examination only of upper canine to upper canine. No disclosing should be done. Only easily visible plaque should be considered and recent debris (such as small pieces of crisp found in an otherwise clean mouth immediately after a school lunchtime or break) should be ignored.

The coding to be used is:

0 Teeth appear clean
1 Little plaque visible
2 Substantial amount of plaque visible
9 Assessment cannot be made for upper anterior sextant

11.2 Dentition status

Teeth and surfaces will be examined in a standard order. Either the conventional nomenclature or the FDI 2 digit tooth numbering system may be employed. The objective is for the examiner to record the present status of the teeth in terms of disease and treatment history.

The condition of each tooth surface will be recorded using the BASCD standardised criteria (BASCD) Diagnostic Criteria for Caries Prevalence Surveys.[6] The application of these criteria will be taught using the BASCD teaching pack.

Data will be recorded by tooth surface. The boundary between mesial/distal surface and the adjacent lingual/buccal surface is demarcated by a line running across the point of maximum curvature.

11.3 Conventions

The following conventions will apply:

a) A tooth is deemed to have erupted when any part of it is visible in the mouth. Unerupted surfaces of an erupted tooth will be regarded as sound.

b) The presence of supernumerary teeth will not be recorded. If a tooth and a supernumerary exactly resemble one another then the distal of the two will be regarded as the supernumerary.

c) MISSING PRIMARY INCISORS ARE ASSUMED EXFOLIATED AND ASSIGNED TOOTH CODE 8.

d) Caries takes precedence over non-carious defects, e.g. hypoplasia.

e) Retained roots following extraction or gross breakdown should be recorded as code 3.

f) Discoloured, non-vital incisors, without caries or fractures should be scored T for trauma on all surfaces.

g) Surfaces which are obscured, e.g. banded teeth, should be assumed to be sound and coded ‘-‘ on paper charts, ‘0’ on DSP2 charts.

11.4 Teeth present

Before coding the status of individual surfaces, it may be useful to identify which teeth are present and which are absent. A staged examination is recommended as follows:

a) the teeth present or absent are described as such: mirror only.

b) tooth surface examination: mirror + cotton wool (for drying).

11.5 Absent teeth

Tooth code 6 – extracted due to caries
Surfaces are regarded as missing if the tooth of which they were a part, has been extracted because it was carious. Surfaces which are absent for any other reason, are not included in this category.

If there has been an extraction and root remains have been left in place, code 3 should be used.

All missing primary canines and primary molars will be considered to have been extracted (code 6) unless there is unquestionable evidence that a tooth has been extracted or lost for other reasons.

Missing primary incisors **will not** be counted and should be coded as code 8 – unerupted or missing other.

Tooth code 8 – unerupted or missing other
This code will be used where there are missing primary incisors (see section 10.3 c and 10.5 above).

11.6 Obscured surfaces

All obscured surfaces are assumed sound (surface code '-' sound) unless there is evidence of disease experience on the remaining exposed part of the tooth, in which case the tooth should be coded according to its classification for those exposed surfaces.

11.7 Caries diagnostic criteria and codes

The diagnosis of the condition of tooth surfaces will be visual and the diagnostic criteria and codes will be strictly adhered to. Unless the criteria are fulfilled, caries will not be recorded as present. A single digit code, the descriptor code, will be used to describe the state of each surface. These codes, which are mutually exclusive, are as follows:

Surface code ▪ - Sound (code 0 in DSP2)
Criteria – a surface is recorded as 'sound' using a dashed mark ' – ' if it shows no evidence of treated or untreated clinical caries at the 'caries into dentine' threshold. The early stages of caries, as well as other similar conditions, are excluded. Surfaces with the following defects, in the absence of other positive criteria, should be coded as present and 'sound':

- white or chalky spots
- discoloured or rough spots

- stained pits or fissures in the enamel that are not associated with a carious lesion into dentine
- dark, shiny, hard, pitted areas of enamel in the tooth showing signs of moderate to severe fluorosis

All questionable lesions should be coded as 'sound'.

Surface code 1 – arrested dentinal decay
Criteria - surfaces will fall into this category if there is arrested caries into dentine. This code should **only be used** for arrested dentinal decay.

Surface code 2 – caries into dentine
Criteria - surfaces are regarded as decayed if after visual inspection there is a carious lesion into dentine. On incisors where the lesion starts mesially or distally, buccal / lingual surfaces will normally be involved.

Surface code 3 – decay with pulpal involvement
Criteria - surfaces are regarded as falling into this category if there is a carious lesion that involves the pulp, whether or not there is a filling in the surface. Retained roots following extraction or gross breakdown should also be recorded as code 3.

Surface code 4 – filled and decayed
Criteria - a surface that has a filling and a carious lesion fulfilling the criteria for code 2 (whether or not the lesion[s] are in physical association with the restoration[s]) will fall into this category unless the lesion is so extensive as to be classified as 'decay with pulpal involvement', in which case the filling would be ignored and the surface classified code 3.

Surface code 5 – filled with no decay
Criteria – surfaces which contain a satisfactory permanent restoration of any material, will be coded under this category (with the exception of obvious sealant restorations which are coded separately as code N).

Surface code R – filled, needs replacing (not carious)
Criteria - a filled surface is regarded as falling into this category if the restoration is chipped or cracked and needs replacing but there is no evidence of caries into dentine present on the same surface.

Lesions or cavities containing a temporary dressing, or cavities from which a restoration has been lost will be regarded as 'filled, needs replacing' unless there is also evidence of caries into dentine, in which case they will be coded in the appropriate category of 'decayed'.

Note: the number of teeth/surfaces scored R should be separately identified. However, if categories are to be combined later, code R surfaces are to be considered as part of the 'filled' component as no new caries is evident.

Surface code C – crown
Criteria - this code is used for all surfaces which have been permanently crowned. This is irrespective of the materials employed or of the reasons leading to the placement of the crown. Note that code C also applies to pre-formed and stainless steel crowns.

Surface code T – trauma
Criteria – a surface will be recorded as traumatised if, in the opinion of the examiner, it has been subject to trauma and as a result is fractured so as to expose dentine, or is discoloured, or has a temporary or permanent restoration (excluding a crown). Minor trauma, affecting enamel only, will be ignored.

Where a tooth is missing through trauma, all surfaces should be coded T.

Any surface exhibiting caries experience, as defined by the caries criteria, will be recorded with the appropriate caries experience code (code 1-5), irrespective of the presence of traumatic damage.

11.8 Sealed surfaces

The ball-ended probe should be used to assist in the detection of sealants. Care should be taken to differentiate sealed surfaces from those restored with tooth coloured materials used in prepared cavities which have defined margins and no evidence of fissure sealant. The latter are regarded as fillings and are allocated the appropriate code, i.e., 4, 5 or R. Sealant codes should only be used if the surface contains evidence of sealant (including cases with a partial loss of sealant), is otherwise sound and does not contain an amalgam or conventional tooth coloured filling.

Surface code $ – sealed surface, type unknown
Criteria – all occlusal, buccal and lingual surfaces containing some type of fissure sealant but where no evidence of a defined cavity margin can be seen (note: this category will inevitably include both preventive and therapeutic sealants).

Where a clear sealant is in place and there appears to be a lesion showing through the material, the surface should still be coded code $ – sealed surface, type unknown.

Surface code N – obvious sealant restorations
Criteria – all occlusal, buccal and lingual surfaces containing a tooth coloured restoration where there is evidence of a defined cavity margin and a sealed unrestored fissure. If doubt exists as to whether a preventive sealant or a sealant restoration is present, the surface should be regarded as being preventively sealed - code $.

When doubt exists about the classification of any condition, the lower category should always be recorded.

11.9 Abscess/sepsis

All children should be examined for the presence or absence of sepsis. Following examination of the mouth for caries, if, in the opinion of the trained examiner, the presence of an abscess or sinus has been noted – record code 1 in the appropriate section on the form. If no abscess or sinus present – code 0.

All sepsis must be recorded regardless of cause. No attempt should be made to identify the cause of the infection.

11.10 Optional spare variables

Optional variable for assessment of treatment need

An optional spare variable may be used in the DSP2 format to collect broad information on treatment need. Criteria will be agreed locally.

Optional data to identify ward, locality or other unit

Spare variables have been provided, as usual, to allow collection of further data which may be analysed locally and this should accommodate descriptors of ward, locality or other unit. If these three are insufficient for local needs, the national format can be amended to add in additional variables **at the end**. The new format should be renamed to distinguish it from the standard format.

Note that if ward level estimates are required, sampling should be undertaken to ensure there is sufficient representation in each ward to be able to produce robust estimates. This does not mean that all schools or all children need to be involved as there are alternative sampling methods which are far more efficient than this. Assistance is available regarding larger samples from DECs or from Girvan Burnside.

12. Reporting of data

Data should be entered into a secure computer with the Access or DSP2 format **for the 2016-17** survey as soon as possible after visiting the school. Data should not be left to be entered as a batch when all fieldwork is completed.

Prior to sending on data files, each fieldwork team is responsible for checking their data for inaccuracies. The main areas for error occur with incorrect dates of birth and/or ages, duplicate entries for children or sites and entry of clinical data for children coded absent.

Guidance will be provided which will give a step-by-step guide to the whole data handling process. This will be available from your DEC.

Once data has been checked and errors corrected, files should be correctly labelled according to the guidance and sent on to the relevant DEC to upload. Files can be passed by hand on password-protected memory sticks or disks directly to the DEC or they can be sent as email attachments from an nhs.net address to an nhs.net address. Separate files should be formed for each local authority, labelled to indicate the age group and local authority to which they refer.

The following will be reported using Appendix Q:

12.1 Start and finish dates of the period of examinations (dd/mm/yyyy–dd/mm/yyyy).

12.2 Total number of schools providing education for five-year olds.

12.3 Number of schools visited providing education for five-year olds.

12.4 Total number of five-year-old children attending listed schools.

12.5 Number of five-year-old children from whom consent was initially sought.

12.6 Number of five-year-old children with parental consent, parental consent refused and consent form not returned.

12.7 Number of five-year-old consented children examined, absent and refused examination.

Data will be submitted as cleaned Access or DSP2 survey files and summary reports submitted as completed Excel documents.

Information to allow identification of NHS numbers and linkage to height and weight data should be entered into a separate Excel worksheet for each local authority using Appendix Pii, which is password protected (see section 10.1). Extra worksheets should be added by using the worksheet function ‘Make a copy’. The whole workbook should be saved with the filename indicates the single lower-tier local authority it contains or the upper-tier local authority, which includes several lower tiers for whom worksheets have been completed.

All returns should be made to DECs as soon as possible after completion of the survey and no later than 31 July 2017. These must only be made by direct handing over of a password-protected memory stick or disc or by email attachments from an nhs.net address to an nhs.net address and should include:

i) the completed appendix Q summary worksheet for each lower-tier local authority

ii) the Access/DSP2 survey file for each local authority labelled to indicate which local authority it refers to

iii) the completed appendix Pii for each lower-tier local authority

DECs will upload the data files received from fieldwork teams to the DPH intelligence team, via a secure portal.

The national report and local authority tailored reports will be provided by the DPH epidemiology team and the Risk Factors Intelligence Team of the Chief Knowledge Officer directorate.

Cleaned and verified copies of the raw, anonymised data will be available to DECs as soon as practicable after the publication of the main report. This will enable DECs and colleagues working in PHE centres to make maximum use of their data if further analysis is required for local use.

Local authority personnel can apply to become a super-user and access the raw, anonymised data for specific purposes via this process:

1. Local authority requestor to send an email to DentalPHIntelligence@phe.gov.uk providing the following information:
    - Name of individual to be allocated as 'super user'
    - Local Authority
    - Contact details
2. The nominated 'Super User' will be contacted by a member of the DPHEP who will send a data sharing agreement to be sent over for signing.
3. Once the signed agreement has been received the super user will be sent their (anonymised) data along with a set of analysis guidance notes.

Other data requests

Any data requests that are for national data, or complex queries, should be emailed to DentalPHIntelligence@phe.gov.uk. The request will be considered by Risk Factors Intelligence (Knowledge and Intelligence) and the Dental Public Health Epidemiology Team and, if feasible, will either be sent to the appropriate DEC or Super User for completion or conducted on a 'once for all' basis.

13. References

1. Department of Health (2010). Equity and excellence: Liberating the NHS. London, The Stationery Office. Accessed in June 2016 from : https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213823/dh_117794.pdf

2. Statutory Instrument 2012 No 3094. National Health Service, England Social Care Fund, England Public Health, England. The NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Health watch) Regulations 2012. Accessed in June 2016 from: http://origin-www.legislation.gov.uk/uksi/2012/3094/part/4/made

3. Public Health England (2014). Local Authorities improving oral health for children and young people: An evidence-informed toolkit for local authorities. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/321503/CBOHMaindocumentJUNE2014.pdf

4. Public Health England (2015). The relationship between dental caries and obesity in children: an evidence summary. PHE publications gateway number: 2015380. Accessed in June 2016 from : https://www.gov.uk/government/publications/dental-caries-and-obesity-their-relationship-in-children

5. Pitts, N.B., Evans, D.J., Pine, C.M. (1997): British Association for the Study of Community Dentistry (BASCD) diagnostic criteria for caries prevalence surveys – 1996/97. Community Dental Health 14: (Supplement 1), 6-9.

6. Pine, C.M., Pitts, N.B., Nugent, Z.J. (1997a): British Association for the Study of Community Dentistry (BASCD) guidance on sampling for surveys of child dental health. A BASCD coordinated dental epidemiology programme quality standard. Community Dental Health 14: (Supplement 1), 10-17.

7. Pine, C.M., Pitts, N.B., Nugent, Z.J. (1997b): British Association for the Study of Community Dentistry (BASCD) guidance on the statistical aspects of training and calibration of examiners for surveys of child dental health. A BASCD co-ordinated dental epidemiology programme quality standard. Community Dental Health 14, (Supplement 1), 18-29.

8. The NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012.

9. Silness, J. and Loe, H. (1964). Periodontal disease in pregnancy. II Correlation between oral hygiene and periodontal condition. Acta Odontologica Scandinavica 22: 121–135.

14. Table of appendices

* Documents will be available in Word format from www.nwph.net/dentalhealth

~ Document will be available in Excel format from www.nwph.net/dentalhealth

Appendix A. Statutory Instrument 2012, No. 3094 - **extract**

S T A T U T O R Y I N S T R U M E N T S

2012 No. 3094

NATIONAL HEALTH SERVICE, ENGLAND SOCIAL CARE FUND, ENGLAND PUBLIC HEALTH, ENGLAND

The NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012

Made - - - - 12th December 2012
Laid before Parliament 17th December 2012
Coming into force in accordance with regulation 1(2)

Extract from pages 8, 9, 26 and 27

PART 4

DENTAL PUBLIC HEALTH FUNCTIONS OF LOCAL AUTHORITIES

Interpretation

16. In this Part—

"oral health promotion programme" means a health promotion and disease prevention programme the underlying purpose of which is to educate and support members of the public about ways in which they may improve their oral health;

"oral health survey" means a survey to establish the prevalence and incidence of disease or abnormality of the oral cavity;

"water fluoridation programme" means fluoridation arrangements made under section 87(1) (fluoridation of water supplies at request of relevant authorities) of the Water Industry Act 1991(**g**)[1].

Exercise of functions of local authorities

17.—

(1) Each local authority (**h**)[2] shall have the following functions in relation to dental public health in England.
(2) A local authority shall provide, or shall make arrangements to secure the provision of, the following within its area—

1 (**g**) 1991 c.56. Section 87(1) is substituted by section 58(1) and (2) of the Water Act 2003 (c.37).
2 (**h**) *See* section 2B(5) of the 2006 Act for the definition of "local authority", which is also applied to section 111 by virtue of section 111(3) of that Act.

(a) to the extent that the authority considers appropriate for improving the health of the people in its area, oral health promotion programmes;

(b) oral health surveys to facilitate—

(i) the assessment and monitoring of oral health needs,

(ii) the planning and evaluation of oral health promotion programmes,

(iii) the planning and evaluation of the arrangements for provision of dental services as part of the health service, and

(iv) where there are water fluoridation programmes affecting the authority's area, the monitoring and reporting of the effect of water fluoridation programmes.

(3) The local authority shall participate in any oral health survey conducted or commissioned by the Secretary of State under paragraph 13(1) of Schedule 1 to the 2006 Act (powers in relation to research etc)**(a)**[3] so far as that survey is conducted within the authority's area.

Revocations and transitional arrangements

18.—

(1) The Functions of Primary Care Trusts (Dental Public Health) (England) Regulations 2006(**b**)[4] ("the 2006 Regulations") are revoked.

(2) This paragraph applies where, in the exercise of its functions under the 2006 Regulations, a Primary Care Trust—

(a) provided an oral health promotion programme or an oral health survey which was ongoing immediately prior to section 29 of the 2012 Act coming fully into force, or

(b) participated in an oral health survey required by the Department of Health which was ongoing immediately prior to section 29 of the 2012 Act coming fully into force.

(3) Where paragraph (2) applies, each local authority whose area fell wholly or partly within the area of the Primary Care Trust shall continue to carry out the oral health promotion programme or oral health survey, to the extent that the programme or survey relates to persons in the local authority's area.

Signed by authority of the Secretary of State for Health.
Anna Soubry
Parliamentary Under-Secretary of State for Health,
Department of Health

12th December 2012

EXPLANATORY NOTE
(This note is not part of the Regulations)

These Regulations make provision in relation to the designation of certain NHS bodies as Care Trusts, the public health functions of local authorities and Local Healthwatch organisations.

Part 4 specifies the functions to be exercised by local authorities in relation to dental public health in England.

The functions to be exercised by local authorities in relation to dental public health in England as specified in Part 4, relate to the provision of oral health promotion programmes and oral health surveys. In the case of oral health surveys, local authorities must make their own arrangements for oral health surveys and must also participate in any such surveys conducted or commissioned by the Secretary of State.

3 (**a**) Paragraph 13 of Schedule 1 to the 2006 Act is substituted by section 17(2) and (13) of the 2012 Act.
4 (**b**) S.I. 2006/185.

Appendix B. Letter of support from programme lead for dental public health, Public Health England, to directors of public health

Public Health England

Dental Public Health
Skipton House
80 London Road
London SE1 6LH

T +44 (0)20 7654 8179

www.gov.uk/phe

To: Directors of Public Health
for forwarding to Directors of Children's Services

1st July 2016
Gateway number: xxxxxx

Dear Director of Public Health and Directors of Children's Services,

Re: Results of the 2015 national five-year-old dental survey and notice of the 2016/17 survey

On 10 May this year the National Epidemiology Programme for England: Oral health survey of five-year-old children 2015[i] was published and attracted considerable media interest. The results show a continued increase in the proportion of children with no obvious dental decay from 69.1% in 2008 to 75.2% in 2015. There was continued variation at regional and local authority level for both prevalence and severity of dental decay. The areas with poorer oral health tended to be in the north and in the more deprived local authority areas.

The survey had the highest participation rates ever, with all 152 upper-tier local authorities taking part, covering 324 out of 326 lower tier local authorities.

There are already excellent examples across the country of local authority led oral health improvement interventions and integration of oral health improvement into local policy which have resulted in improved outcomes for local populations.

I would like to take this opportunity to thank local authorities and particularly directors of public health for their support.

The results are encouraging, however, one child with tooth decay is one too many and this is a preventable disease. Toothache can cause pain, infection, difficulties with eating, sleeping and socialising and impact on school readiness and school absence. Extraction of teeth under general anaesthetic remains one of the most common reasons for children to be admitted to hospital.

The national surveys provide benchmarking data that may be used by local authorities in joint strategic needs assessments to both plan and commission oral health improvement interventions and evaluate them. The surveys also inform national policy.

Local authorities have had responsibility for improving health and reducing inequalities, including oral health, since April 2013. Evidence informed documents to assist local authorities with improving oral health and commissioning decisions were published in 2014 by NICE[ii] and PHE.[iii] The PHE document specifically focuses on improving the oral health of children and young adults and PHE is currently developing a cost effectiveness review and return on investment modelling tool of population based oral health improvement programmes for children aged 0 – 5 years. We hope to publish these early in the autumn.

I would also like to take this opportunity to make you aware of this year's oral health survey of five-year-old schoolchildren, which is taking place during the academic year 2016/17. The findings will be made widely available and shared with you and your colleagues.

This survey will use the same sampling frame as previous surveys to allow statistical comparison at local authority level. The surveys are currently the only measures we have of oral health and the national programme produces robust information, which is comparable across local authorities offering benchmarking and an overall national picture.

Participation in the surveys is required by the NHS Bodies and Local Authorities (Partnership Arrangements, Care Trusts, Public Health and Local Healthwatch) Regulations 2012: Part 4 Regulations, which specify the functions to be exercised by local authorities in relation to dental public health and oral health surveys in England. Local authorities should provide or secure the provision of oral health surveys to: assess and monitor oral health needs, plan and evaluate oral health promotion programmes, plan and evaluate arrangements for provision of dental services and monitor and report on the effect of water fluoridation programmes. In addition, local authorities should participate in any oral health survey conducted or commissioned by the Secretary of State so far as that survey is conducted within the authority's area.

PHE is asking directors of public health to support local involvement in the 2016/17 survey. PHE has dental epidemiology co-ordinators (consultants in dental public health) across England based in PHE centres who will advise during the whole process, including commissioning of these surveys.

It would be helpful if directors of public health could voice their support to directors of children's services and for them to pass on their endorsement to head teachers of primary schools.

As PHE co-ordinates the National Dental Epidemiology Programme we are keen to hear how surveys can continue to respond to the needs of users so I would be happy to receive feedback.

Yours sincerely,

Sandra White BDS, FDSRCS, MPH, FDS(DPH)RCS, FFPH, MBA, PCMedEd

National Lead for Dental Public Health
Email: Sandra.white@phe.gov.uk

[1] *National Epidemiology Programme for England: Oral health survey of five-year-old children (2015. www.nwph.net/dentalhealth/14_15_5yearold/14_15_16/DPHEP%20for%20England%20OH%20Survey%205yr%202015%20Report%20FINAL%20Gateway%20approved.pdf*

[1] *National Institute for Health and Care Excellence. Oral health: approaches for local authorities and their partners to improve the oral health of their communities [Internet]. NICE guidelines [PH55] 2014 [cited 2016 Feb 9]. Available from: www.nice.org.uk/guidance/ph55*

[1] *Public Health England. Local authorities improving oral health: commissioning better oral health for children and young people. An evidence-informed toolkit for local authorities [Internet]. 2014 [cited 2016 Feb 9]. Available from: www.gov.uk/government/publications/improving-oral-health-an-evidence-informed-toolkit-for-local-authorities*

Appendix C. Information about the purpose and nature of the survey

Public Health England dental public health epidemiology programme
Oral health survey of five-year-old children 2016-2017

Dental health surveys involving children have been carried out across the UK since 1987. The information arising from them allows NHS England area teams to plan dental services and health improvement teams to tailor programmes for groups where oral health is poor. The overall aim is to support actions to improve oral health, reduce health inequalities and improve the provision of treatment services.

Local fieldwork teams from the Community Dental Service usually carry out these surveys. As with all NHS employees the teams are covered by the Data Protection Act and take confidentiality very seriously. National and regional training is provided to ensure that high standards are kept and all teams work to the same level at all stages in the survey.

Fieldwork teams will contact randomly sampled primary schools within a local authority area. They will ask for cooperation from the school and for access to lists of all children that may be included, showing dates of birth. From these lists they will identify children who will be the correct age on the day of examination. Explicit, written consent will then be sought via letters home to parents, which the team will provide. The ethnic classification and home postcode of consented children will be requested from school information.

On the day of examination the team will set up their mobile equipment at an agreed location at the school and undertake brief examinations of the consented children's teeth. These examinations take no more than a minute and, as the teams are child friendly, should cause no discomfort or distress.

The information relating to the dental examination is recorded anonymously; no names, gender or complete dates of birth are recorded for this purpose. All data is kept securely and datasets are securely sent to regional centres for uploading via a secure web portal to the national coordinating centre. This centre collates data from all over England and produces reports on levels of dental health for England as a whole and at a variety of local government and health organisation levels. At no point is any individual identifiable, as the data is anonymised from the examination stage and only reported or published as grouped data.

For the 2016/17 survey details are being requested to allow linkage with the height and weight data of the children who take part in the dental survey. The name, date of birth and home postcode will be used to find out NHS numbers and then it will be safely deleted. Only NHS numbers will be used to anonymously link the two sets of data.

It is hoped that all sites contacted will be able to assist the fieldwork teams in this national survey which local authorities have a responsibility to procure by law. The teams try to keep disruption to a minimum and ensure the children involved have a positive experience with the dental team.

Appendix D. Requirement for explicit, positive consent

Consent for School Dental Inspections and Dental Epidemiological Surveys

We have had reason to consider the issue of consent for both school dental inspections and dental surveys. Guidance was issued by the former NHS Management Executive in May 1992 which implied that it is acceptable to rely on negative consent for dental surveys. We are aware that PCTs are relying on this previous guidance to support the use of negative consent. **This guidance should no longer be followed.**

As both of the above stated processes inevitably involve physical contact between a dentist and a child, it is necessary to obtain consent from the child (if he/she is competent to give consent) or from a person with parental responsibility for the child, in accordance with the Department's guidance on consent to treatment[1]. Whilst the risk of any proceedings[2] being brought against a dentist or PCT in relation to a school dental inspection or epidemiological survey might be considered low, in the event that there was, a dentist may not be able to prove that consent had been obtained simply on the basis that letter had been sent out to parents and no objection had been received.

We are aware of concerns about the impact that obtaining positive consent might have on the NHS oral health epidemiology programmes within England. Where programmes are surveying older children eg.10-11 year olds it is likely that a child of this age would be competent to consent to the dental examination, provided it is explained to them what the process involves, for what purpose the information obtained will be used, and that they can refuse to take part if they wish. If the competent 10-11 year old child consents, this will be sufficient.

In relation to younger children, we have been exploring whether positive consent to dental inspections/surveys obtained from the child's parent (or relevant person with parental responsibility) when their child begins school would be sufficient proof of consent.

We consider that a dentist performing these inspections and surveys might be able to rely on such consent, as long as sufficient information is provided to the parent at the time that consent is obtained to enable their consent to be fully informed. It would be good practice to inform parents how many times the procedures would take place and in which school years, and that they may withdraw their consent at any time. It would also be good practice to write to parents to inform them when examinations/surveys are about to be carried out and reminding them that they may withdraw consent if they wish.

As this will be additional information that will need to be obtained from parents at school entry, we will need to discuss with colleagues in DfES how this might be incorporated into the school entry procedures prior to our issuing further formal guidance.

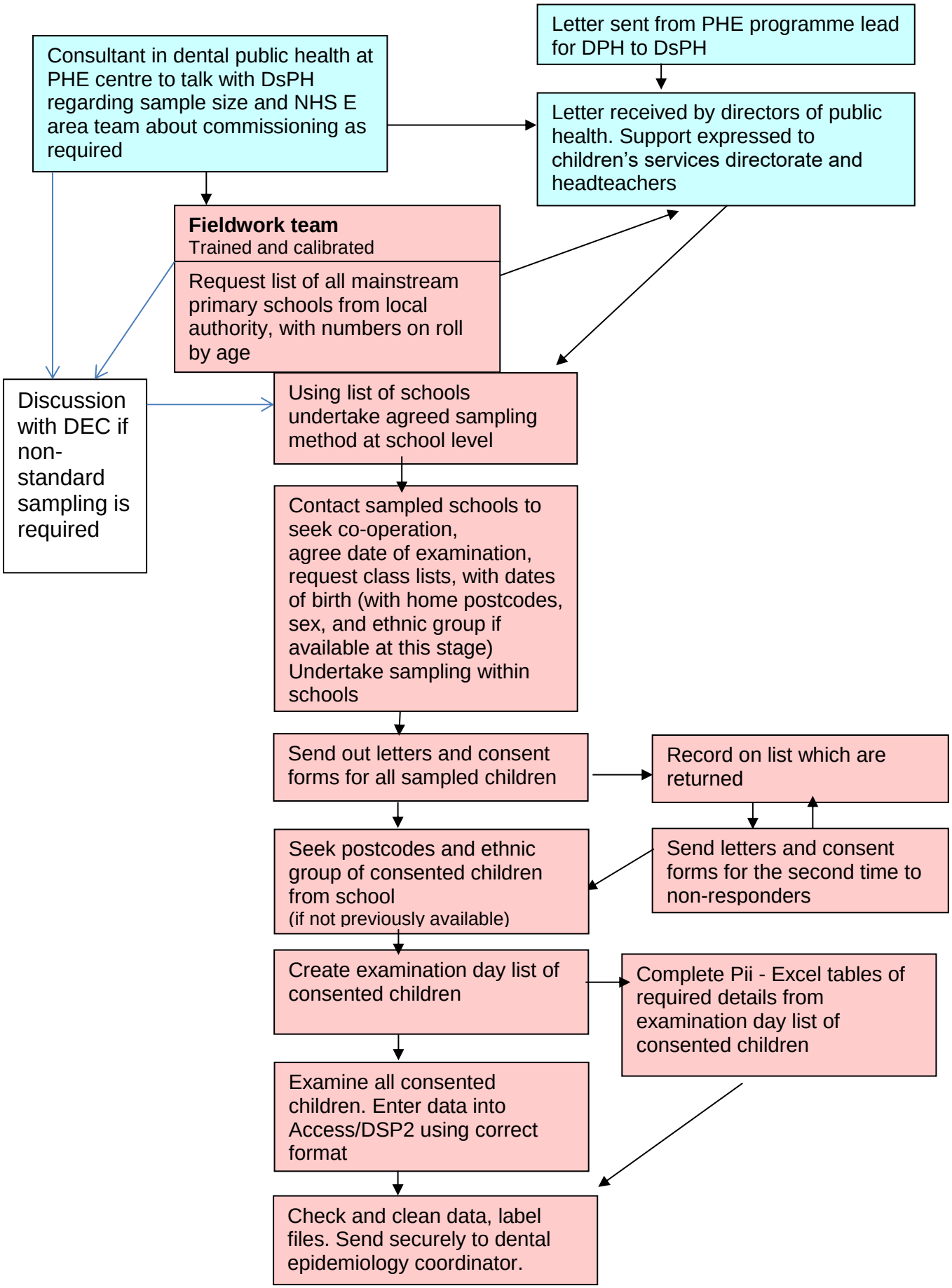
---

[1] *Good practice in Consent* (HSC 2001/023)
http://www.dh.gov.uk/PublicationsAndStatistics/LettersAndCirculars/HealthServiceCirculars/HealthServiceCircularsArticle/fs/en?CONTENT_ID=4003736&chk=OigZnc

http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4005762&chk=7ENk2Q

[2] for battery/assault or negligence, or disciplinary proceedings

Appendix E. Stages for PHE dental public health epidemiology programme teams to undertake the survey



Appendix F. Operational timetable

Training for dental epidemiology coordinators (DECs) – National Protocol	4th and 5th July 2016
National clinical training and calibration for standard examiners	
Local training and calibration for fieldwork teams	September 2016
Data collection and ongoing data entry	To start immediately after regional training and calibration and **completed by 30 June 2017**.
Completion of data checking and labelling of local authority data files. Secure forwarding of cleaned data files to DECs as soon as possible before deadline.	By 31 July 2017.
DECs to upload summaries and copies of local authority data files to the dental public health epidemiology team (DPHET) via the web portal www.nwph.net/dentalhealthupload/login.aspx	To be uploaded as and when they have been checked, completed by 31 August 2017.
DPHET - Checking of data, returning errors for clarification by fieldwork teams via DECs, and collation of clean, verified data	As and when data files arrive.
Knowledge and information team north west (NW KIT)/DPHET – compute estimates for local authorities	From September 2017.
Publication of results on website www.nwph.net/dentalhealth	December 2017 or four months after receipt of last data set dependent upon PHE gateway.
Feedback of cleaned anonymised data	December 2017 or five months after receipt of last data set.

Appendix G. Safe use of Daray lights for dental epidemiology fieldwork

The Daray lamps recommended as standard for dental epidemiology fieldwork are fit for purpose but it is likely that many dental epidemiology fieldwork teams are using Daray lamps that are now some years old. It is important that they are used and maintained correctly to ensure they are safe. This advice is provided in conjunction with Daray Ltd.

These lamps should be PAT tested, as with any electrical equipment, and signs of damage noted and acted upon.

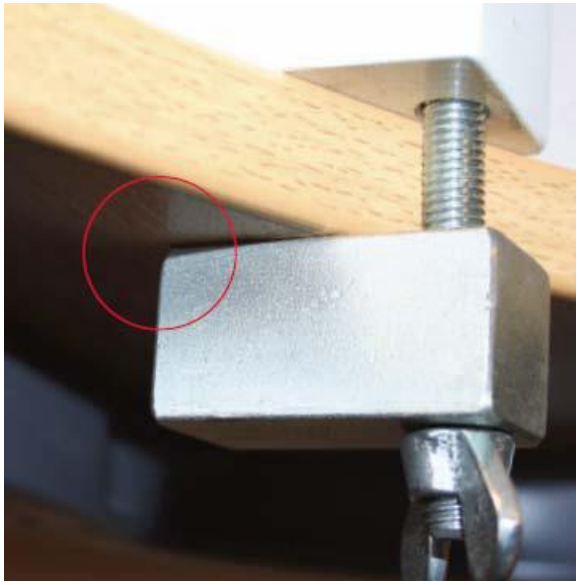
The clamps should be fitted and used correctly and checked to ensure they are firmly fixed to a work surface. For this reason it is best practice to establish a set examination site at a venue and avoid moving around from one room to another.

The Pivot D2 clamp has replaced the Pivot D clamp and can be sourced from Daray Ltd
Tel: 0870 777 2664 Sales.team@daray.co.uk www.Daray.com

The pictures below show how the clamp with a silver clamping bar should be fitted to ensure that the block of the clamp is in full contact with the base of the desk or table surface (pictures 1 and 2). If the wedge shaped bar is fitted upside down it will not be stable (pictures 3 and 4).

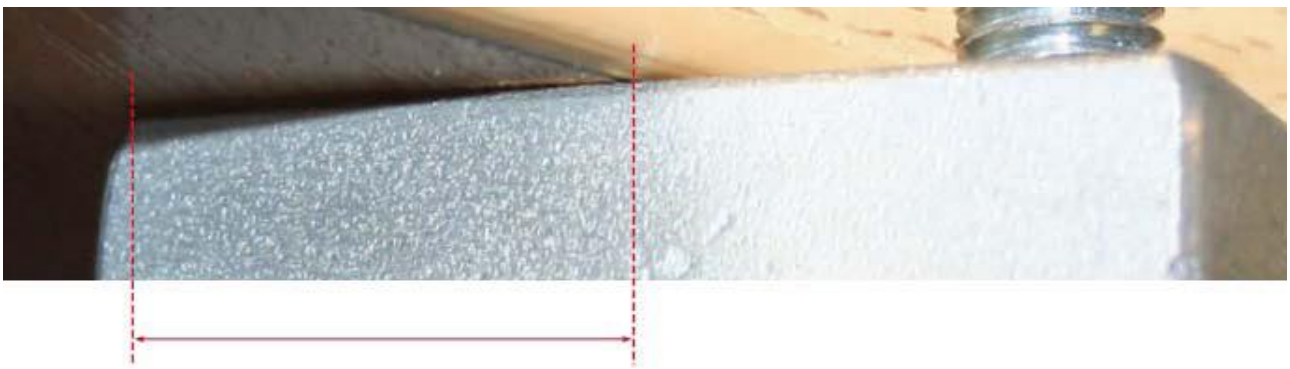
Examiners should check that the lamp is stable before undertaking examinations.

Pic 1. Correct fitting and use of the clamp



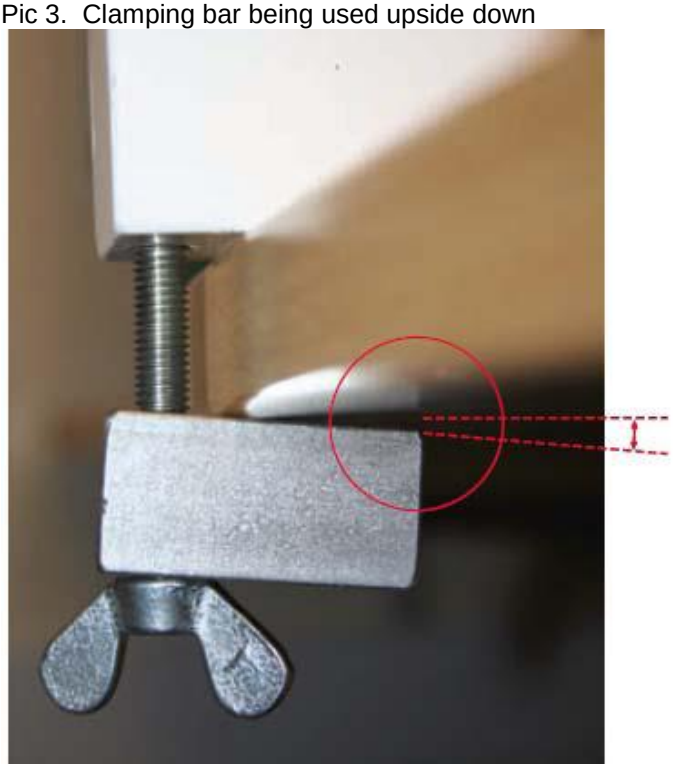
Pic 2. Correct fitting and use of the clamp

Note the surface contact along the length of the clamp

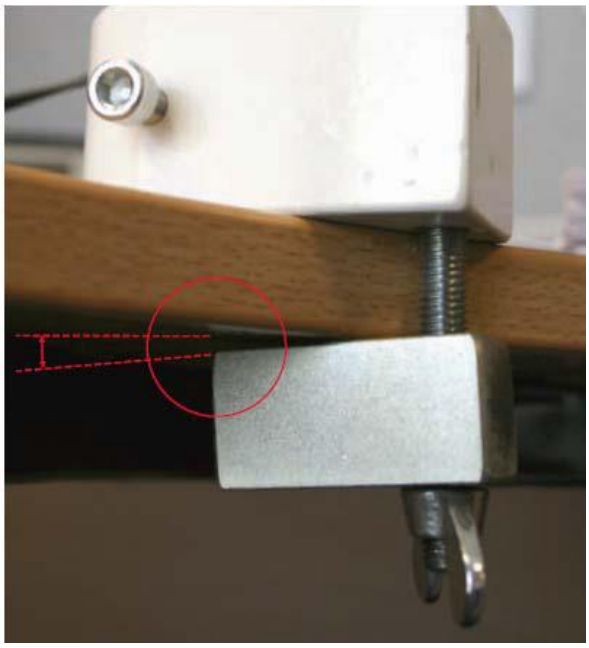


Incorrect use of clamp:

Pic 3. Clamping bar being used upside down



Pic 4. Clamping bar being used upside down



The moving arm should be able to move freely within the socket so that the lamp can be turned without moving the clamping mechanism. This may require the application of a little lubricant to the spigot.

It should be noted that Daray Ltd also manufacture lamps with LED bulbs. These are unsuitable for dental examination as they are too bright for eye safety and they provide a level of light that is too intense for diagnosis and recording of caries. Only the dental survey lamps with **halogen** bulbs should be used.

Appendix H. Sources of information

- This national protocol, Access and DSP2 formats and appendices are all available from the DPHIP website www.nwph.net/dentalhealth

- It is strongly recommended that the Access data collection tool is used instead of the DSP2 one but, in cases where there is insistence upon using this tool and there is a need for a new licence or the number of an old one, contact should be made with Janet Neville [janet.neville@phe.gov.uk] who can arrange this with Dundee University.

- If home postcodes cannot be obtained from schools, school nurses, school health clerks or local child health information services these can be obtained by cross referencing the volunteer's address in the relevant Royal Mail Postal Address Book: www.royalmail.com/address-book

  Alternatively, use the Royal Mail Postcodes on-line at: www.royalmail.com/portal/rm/postcodefinder

- Light source, if new unit required to replace a Daray Versatile (this is no longer produced):

  Either The Daray X100 **Halogen** with Pivotd2 to allow desk-mounting
  Contact Daray Tel: 0333 321 0971
  www.daray.co.uk
  www.daray.co.uk/docs/X100.html

Or The MT608BASCD
Contact Brandon Medical Co. Ltd
Tel: 01132 777393
www.brandon-medical.com/products/medical-lighting/examination-lights/mt6008-examination-lamps

Appendix I. Guidance and adaptation to allow DSP2 to run on new versions of Microsoft Windows. With thanks to colleagues at Cardiff University

[It is strongly recommended that the Access data collection tool is used instead of the DSP2 one]

32-bit and 64-bit Windows

The terms 32-bit and 64-bit refer to the way a computer's processor (also called a CPU), handles information. The 64-bit version of Windows handles large amounts of random access memory (RAM) more effectively than a 32-bit system.

Most programs designed for the 32-bit version of Windows will work on the 64-bit version of Windows. However, this is **not** true for 16-bit applications like DSP2 as the table below shows.

Table 1. Tests of installation of both versions of DSP2 on Windows 7 and 8 operating systems

	Windows 7	**Windows 8**
32-bit	Yes	Yes
64-bit	Yes if use deployment	No

To find out if your computer is running 32-bit or 64-bit Windows, do the following:

1. Open System by clicking the **Start** button, clicking **Control Panel**, clicking **System and Security**, and then clicking **System**.
2. Under **System**, you can view the system type.

DSP2 Deployment

As a short-term interim, and somewhat cumbersome measure, DSP2 may be deployed on 64-bit Windows 7 by using Windows XP Mode. This comes as a separate download and works only with Windows 7 Professional, Ultimate, and Enterprise.

Machines purchased from retail outlets will be running the consumer versions of Windows 7. A Windows Enterprise licence will be required and the Windows operating system will need to be re-installed. It is recommended that professional IT support is provided for this process.

Windows XP mode is not present in Windows 8 though it may be possible to deploy this using Microsoft's virtualisation technology Hyper-V.

64-bit Windows machines are becoming very common and it is likely that the next version of Windows will be 64-bit only. Because of this, and the extra support required to deploy DSP2 on Windows 7 there is a clear need to update or replace DSP2.

Summary

- Existing installations will continue to work. However Microsoft are withdrawing support for Windows XP. Corporate type environments will be replacing Windows XP with Windows 7, and in many cases this will be 64-bit Windows 7 (eg, Cardiff University).
- Both versions (1.1 and 2.1) of DSP2 install on 32-bit Windows 7 and 8.
- DSP2 will install on 64-bit Windows 7 but will require IT support to install, and an enterprise licence of Windows will need to be acquired.

Appendix J. List of codes for local authorities

Upper tier local authority	Upper code	Lower tier local authority	Lower code
Barking and Dagenham	E09000002	Barking and Dagenham	E09000002
Barnet	E09000003	Barnet	E09000003
Barnsley	E08000016	Barnsley	E08000016
Bath and North East Somerset	E06000022	Bath and North East Somerset	E06000022
Bedford	E06000055	Bedford	E06000055
Bexley	E09000004	Bexley	E09000004
Birmingham	E08000025	Birmingham	E08000025
Blackburn with Darwen	E06000008	Blackburn with Darwen	E06000008
Blackpool	E06000009	Blackpool	E06000009
Bolton	E08000001	Bolton	E08000001
Bournemouth	E06000028	Bournemouth	E06000028
Bracknell Forest	E06000036	Bracknell Forest	E06000036
Bradford	E08000032	Bradford	E08000032
Brent	E09000005	Brent	E09000005
Brighton and Hove	E06000043	Brighton and Hove	E06000043
Bristol, City of	E06000023	Bristol, City of	E06000023
Bromley	E09000006	Bromley	E09000006
Buckinghamshire	E10000002	Aylesbury Vale	E07000004
		Chiltern	E07000005
		South Bucks	E07000006
		Wycombe	E07000007
Bury	E08000002	Bury	E08000002
Calderdale	E08000033	Calderdale	E08000033
Cambridgeshire	E10000003	Cambridge	E07000008
		East Cambridgeshire	E07000009
		Fenland	E07000010
		Huntingdonshire	E07000011
		South Cambridgeshire	E07000012
Camden	E09000007	Camden	E09000007
Central Bedfordshire	E06000056	Central Bedfordshire	E06000056
Cheshire East	E06000049	Cheshire East	E06000049
Cheshire West and Chester	E06000050	Cheshire West and Chester	E06000050
City of London	E09000001	City of London	E09000001
Cornwall	E06000052	Cornwall	E06000052
County Durham	E06000047	County Durham	E06000047
Coventry	E08000026	Coventry	E08000026
Croydon	E09000008	Croydon	E09000008
Cumbria	E10000006	Allerdale	E07000026
		Barrow-in-Furness	E07000027
		Carlisle	E07000028
		Copeland	E07000029
		Eden	E07000030
		South Lakeland	E07000031
Darlington	E06000005	Darlington	E06000005

Upper tier local authority	Upper code	Lower tier local authority	Lower code
Derby	E06000015	Derby	E06000015
Derbyshire	E10000007	Amber Valley	E07000032
		Bolsover	E07000033
		Chesterfield	E07000034
		Derbyshire Dales	E07000035
		Erewash	E07000036
		High Peak	E07000037
		North East Derbyshire	E07000038
		South Derbyshire	E07000039
Devon	E10000008	East Devon	E07000040
		Exeter	E07000041
		Mid Devon	E07000042
		North Devon	E07000043
		South Hams	E07000044
		Teignbridge	E07000045
		Torridge	E07000046
		West Devon	E07000047
Doncaster	E08000017	Doncaster	E08000017
Dorset	E10000009	Christchurch	E07000048
		East Dorset	E07000049
		North Dorset	E07000050
		Purbeck	E07000051
		West Dorset	E07000052
		Weymouth and Portland	E07000053
Dudley	E08000027	Dudley	E08000027
Ealing	E09000009	Ealing	E09000009
East Riding of Yorkshire	E06000011	East Riding of Yorkshire	E06000011
East Sussex	E10000011	Eastbourne	E07000061
		Hastings	E07000062
		Lewes	E07000063
		Rother	E07000064
		Wealden	E07000065
Enfield	E09000010	Enfield	E09000010
Essex	E10000012	Basildon	E07000066
		Braintree	E07000067
		Brentwood	E07000068
		Castle Point	E07000069
		Chelmsford	E07000070
		Colchester	E07000071
		Epping Forest	E07000072
		Harlow	E07000073
		Maldon	E07000074
		Rochford	E07000075
		Tendring	E07000076
		Uttlesford	E07000077

Upper tier local authority	Upper code	Lower tier local authority	Lower code
Gateshead	E08000020	Gateshead	E08000020
Gloucestershire	E10000013	Cheltenham	E07000078
		Cotswold	E07000079
		Forest of Dean	E07000080
		Gloucester	E07000081
		Stroud	E07000082
		Tewkesbury	E07000083
Greenwich	E09000011	Greenwich	E09000011
Hackney	E09000012	Hackney	E09000012
Halton	E06000006	Halton	E06000006
Hammersmith and Fulham	E09000013	Hammersmith and Fulham	E09000013
Hampshire	E10000014	Basingstoke and Deane	E07000084
		East Hampshire	E07000085
		Eastleigh	E07000086
		Fareham	E07000087
		Gosport	E07000088
		Hart	E07000089
		Havant	E07000090
		New Forest	E07000091
		Rushmoor	E07000092
		Test Valley	E07000093
		Winchester	E07000094
Haringey	E09000014	Haringey	E09000014
Harrow	E09000015	Harrow	E09000015
Hartlepool	E06000001	Hartlepool	E06000001
Havering	E09000016	Havering	E09000016
Herefordshire, County of	E06000019	Herefordshire, County of	E06000019
Hertfordshire	E10000015	Broxbourne	E07000095
		Dacorum	E07000096
		East Hertfordshire	E07000097
		Hertsmere	E07000098
		North Hertfordshire	E07000099
		St Albans	E07000240
		Stevenage	E07000101
		Three Rivers	E07000102
		Watford	E07000103
		Welwyn Hatfield	E07000241
Hillingdon	E09000017	Hillingdon	E09000017
Hounslow	E09000018	Hounslow	E09000018
Isle of Wight	E06000046	Isle of Wight	E06000046
Isles of Scilly	E06000053	Isles of Scilly	E06000053
Islington	E09000019	Islington	E09000019
Kensington and Chelsea	E09000020	Kensington and Chelsea	E09000020

Upper tier local authority	Upper code	Lower tier local authority	Lower code
Kent	E10000016	Ashford	E07000105
		Canterbury	E07000106
		Dartford	E07000107
		Dover	E07000108
		Gravesham	E07000109
		Maidstone	E07000110
		Sevenoaks	E07000111
		Shepway	E07000112
		Swale	E07000113
		Thanet	E07000114
		Tonbridge and Malling	E07000115
		Tunbridge Wells	E07000116
Kingston upon Hull, City of	E06000010	Kingston upon Hull, City of	E06000010
Kingston upon Thames	E09000021	Kingston upon Thames	E09000021
Kirklees	E08000034	Kirklees	E08000034
Knowsley	E08000011	Knowsley	E08000011
Lambeth	E09000022	Lambeth	E09000022
Lancashire	E10000017	Burnley	E07000117
		Chorley	E07000118
		Fylde	E07000119
		Hyndburn	E07000120
		Lancaster	E07000121
		Pendle	E07000122
		Preston	E07000123
		Ribble Valley	E07000124
		Rossendale	E07000125
		South Ribble	E07000126
		West Lancashire	E07000127
		Wyre	E07000128
Leeds	E08000035	Leeds	E08000035
Leicester	E06000016	Leicester	E06000016
Leicestershire	E10000018	Blaby	E07000129
		Charnwood	E07000130
		Harborough	E07000131
		Hinckley and Bosworth	E07000132
		Melton	E07000133
		North West Leicestershire	E07000134
		Oadby and Wigston	E07000135
Lewisham	E09000023	Lewisham	E09000023
Lincolnshire	E10000019	Boston	E07000136
		East Lindsey	E07000137
		Lincoln	E07000138
		North Kesteven	E07000139
		South Holland	E07000140
		South Kesteven	E07000141
		West Lindsey	E07000142

Upper tier local authority	Upper code	Lower tier local authority	Lower code
Liverpool	E08000012	Liverpool	E08000012
Luton	E06000032	Luton	E06000032
Manchester	E08000003	Manchester	E08000003
Medway	E06000035	Medway	E06000035
Merton	E09000024	Merton	E09000024
Middlesbrough	E06000002	Middlesbrough	E06000002
Milton Keynes	E06000042	Milton Keynes	E06000042
Newcastle upon Tyne	E08000021	Newcastle upon Tyne	E08000021
Newham	E09000025	Newham	E09000025
Norfolk	E10000020	Breckland	E07000143
		Broadland	E07000144
		Great Yarmouth	E07000145
		King's Lynn and West Norfolk	E07000146
		North Norfolk	E07000147
		Norwich	E07000148
		South Norfolk	E07000149
North East Lincolnshire	E06000012	North East Lincolnshire	E06000012
North Lincolnshire	E06000013	North Lincolnshire	E06000013
North Somerset	E06000024	North Somerset	E06000024
North Tyneside	E08000022	North Tyneside	E08000022
North Yorkshire	E10000023	Craven	E07000163
		Hambleton	E07000164
		Harrogate	E07000165
		Richmondshire	E07000166
		Ryedale	E07000167
		Scarborough	E07000168
		Selby	E07000169
Northamptonshire	E10000021	Corby	E07000150
		Daventry	E07000151
		East Northamptonshire	E07000152
		Kettering	E07000153
		Northampton	E07000154
		South Northamptonshire	E07000155
		Wellingborough	E07000156
Northumberland	E06000048	Northumberland	E06000048
Nottingham	E06000018	Nottingham	E06000018
Nottinghamshire	E10000024	Ashfield	E07000170
		Bassetlaw	E07000171
		Broxtowe	E07000172
		Gedling	E07000173
		Mansfield	E07000174
		Newark and Sherwood	E07000175
		Rushcliffe	E07000176
Oldham	E08000004	Oldham	E08000004

Upper tier local authority	Upper code	Lower tier local authority	Lower code
Oxfordshire	E10000025	Cherwell	E07000177
		Oxford	E07000178
		South Oxfordshire	E07000179
		Vale of White Horse	E07000180
		West Oxfordshire	E07000181
Peterborough	E06000031	Peterborough	E06000031
Plymouth	E06000026	Plymouth	E06000026
Poole	E06000029	Poole	E06000029
Portsmouth	E06000044	Portsmouth	E06000044
Reading	E06000038	Reading	E06000038
Redbridge	E09000026	Redbridge	E09000026
Redcar and Cleveland	E06000003	Redcar and Cleveland	E06000003
Richmond upon Thames	E09000027	Richmond upon Thames	E09000027
Rochdale	E08000005	Rochdale	E08000005
Rotherham	E08000018	Rotherham	E08000018
Rutland	E06000017	Rutland	E06000017
Salford	E08000006	Salford	E08000006
Sandwell	E08000028	Sandwell	E08000028
Sefton	E08000014	Sefton	E08000014
Sheffield	E08000019	Sheffield	E08000019
Shropshire	E06000051	Shropshire	E06000051
Slough	E06000039	Slough	E06000039
Solihull	E08000029	Solihull	E08000029
Somerset	E10000027	Mendip	E07000187
		Sedgemoor	E07000188
		South Somerset	E07000189
		Taunton Deane	E07000190
		West Somerset	E07000191
South Gloucestershire	E06000025	South Gloucestershire	E06000025
South Tyneside	E08000023	South Tyneside	E08000023
Southampton	E06000045	Southampton	E06000045
Southend-on-Sea	E06000033	Southend-on-Sea	E06000033
Southwark	E09000028	Southwark	E09000028
St. Helens	E08000013	St. Helens	E08000013
Staffordshire	E10000028	Cannock Chase	E07000192
		East Staffordshire	E07000193
		Lichfield	E07000194
		Newcastle-under-Lyme	E07000195
		South Staffordshire	E07000196
		Stafford	E07000197
		Staffordshire Moorlands	E07000198
		Tamworth	E07000199
Stockport	E08000007	Stockport	E08000007
Stockton-on-Tees	E06000004	Stockton-on-Tees	E06000004
Stoke-on-Trent	E06000021	Stoke-on-Trent	E06000021

Upper tier local authority	Upper code	Lower tier local authority	Lower code
Suffolk	E10000029	Babergh	E07000200
		Forest Heath	E07000201
		Ipswich	E07000202
		Mid Suffolk	E07000203
		St Edmundsbury	E07000204
		Suffolk Coastal	E07000205
		Waveney	E07000206
Sunderland	E08000024	Sunderland	E08000024
Surrey	E10000030	Elmbridge	E07000207
		Epsom and Ewell	E07000208
		Guildford	E07000209
		Mole Valley	E07000210
		Reigate and Banstead	E07000211
		Runnymede	E07000212
		Spelthorne	E07000213
		Surrey Heath	E07000214
		Tandridge	E07000215
		Waverley	E07000216
		Woking	E07000217
Sutton	E09000029	Sutton	E09000029
Swindon	E06000030	Swindon	E06000030
Tameside	E08000008	Tameside	E08000008
Telford and Wrekin	E06000020	Telford and Wrekin	E06000020
Thurrock	E06000034	Thurrock	E06000034
Torbay	E06000027	Torbay	E06000027
Tower Hamlets	E09000030	Tower Hamlets	E09000030
Trafford	E08000009	Trafford	E08000009
Wakefield	E08000036	Wakefield	E08000036
Walsall	E08000030	Walsall	E08000030
Waltham Forest	E09000031	Waltham Forest	E09000031
Wandsworth	E09000032	Wandsworth	E09000032
Warrington	E06000007	Warrington	E06000007
Warwickshire	E10000031	North Warwickshire	E07000218
		Nuneaton and Bedworth	E07000219
		Rugby	E07000220
		Stratford-on-Avon	E07000221
		Warwick	E07000222
West Berkshire	E06000037	West Berkshire	E06000037
West Sussex	E10000032	Adur	E07000223
		Arun	E07000224
		Chichester	E07000225
		Crawley	E07000226
		Horsham	E07000227
		Mid Sussex	E07000228
		Worthing	E07000229

Upper tier local authority	Upper code	Lower tier local authority	Lower code
Westminster	E09000033	Westminster	E09000033
Wigan	E08000010	Wigan	E08000010
Wiltshire	E06000054	Wiltshire	E06000054
Windsor and Maidenhead	E06000040	Windsor and Maidenhead	E06000040
Wirral	E08000015	Wirral	E08000015
Wokingham	E06000041	Wokingham	E06000041
Wolverhampton	E08000031	Wolverhampton	E08000031
Worcestershire	E10000034	Bromsgrove	E07000234
		Malvern Hills	E07000235
		Redditch	E07000236
		Worcester	E07000237
		Wychavon	E07000238
		Wyre Forest	E07000239
York	E06000014	York	E06000014

Source: From ONS Geographical Lookups.

Appendix K. Guide for date of birth bands for survey of five-year olds 2016-17

For this month of exam ↓	**Children born within these ranges will definitely be five years old**		**There may also be a few more in these ranges**
	Earliest birth month and year	**Latest birth month and year**	**Birth month/Year Check day of birth * and ** **
September 2016	October 2010	August 2011	September 2010 and 2011*
October 2016	November 2010	September 2011	October 2010 and 2011*
November 2016	December 2010	October 2011	November 2010 and 2011*
December 2016	January 2011	November 2011	December 2010 and 2011*
January 2017	February 2011	December 2011	January 2011 and 2012**
February 2017	March 2011	January 2012	February 2011 and 2012**
March 2017	April 2011	February 2012	March 2011 and 2012**
April 2017	May 2011	March 2012	April 2011 and 2012**
May 2017	June 2011	April 2012	May 2011 and 2012**
June 2017	July 2011	May 2012	June 2011 and 2012**
July 2017	August 2011	June 2012	July 2011 and 2012**

* If born 2010 birth day should be later than day of exam, if born 2011 birth day should be same day or before day of exam.

** If born 2011 birth day should be later than day of exam, if born 2012 birth day should be same day or before day of exam.

Appendix L. Consent letter and form. To be added to headed notepaper – minor modifications are acceptable, local details to be added

Dear Parent,

Public Health England dental public health epidemiology programme, oral health survey of five-year-old children, 2016-17.

Please will you help us to plan better dental services? To do this we are preparing to look at the teeth of groups of five-year-old children attending mainstream schools. We can then compare dental health between different areas and with results we found from previous surveys.

Please give your consent to your child taking part in this year's survey by signing the attached form and returning it to your child's school. The survey is planned to take place on …….. The children taking part will have a simple examination at their school when a dentist and assistant who are trained to do this work will visit. The dentist will use fresh disposable gloves and sterilised mirrors for each child. The check takes only a few minutes and we will let you know if we find anything wrong. We would be pleased to see you at the school if you would like to be present.

No treatment will be provided, just a quick examination. All children still need to visit their own dentist for regular check-ups.

If you wish to withdraw your consent at any stage please contact the school or the number given below.

This website contains details of how this year's survey will be conducted and reports of previous surveys of children and other groups in the population: http://www.nwph.net/dentalhealth/

The anonymised results of the survey will be sent to the national Public Health England centre so that they can be compared with all other local authorities in England. The findings may be published in a scientific journal but no individual will be identifiable and the analysis and reporting will be carried out on groups.

As part of the survey we will be asking the school to share information they already have, including name, date of birth, home postcode and ethnic group. The information about your child will be stored in a computer file which will be password protected and only dental staff and Public Health England staff will have access to it. This will allow information about dental health to be linked with a dataset containing height and weight information and allow better understanding about these two conditions and see if they are connected.

Thank you for reading this information sheet. If you have any questions please contact ……

Yours sincerely

Clinical Director

CONSENT FORM

I have read and understood the information in the invitation letter about the dental survey.

My child's name is (insert name)…….. Class ……

Please tick appropriate box below:

Yes, I agree to my child taking part in the dental survey ☐ ➡ and, yes, I agree to their information being safely linked to other datasets ☐

No, I do not want my child to be included ☐

Signed……(parent or guardian) Date ……

Name (block capitals) ……

Appendix Li. Suggested information letter for local authorities where parents provide core agreement to whole of school life health surveillance. To be added to headed notepaper – local details to be added, minor modifications are acceptable

Dear Parent,

Public Health England dental public health epidemiology programme, oral health survey of five-year-old children, 2016-17.

Please will you help us to plan better dental services? To do this we are preparing to look at the teeth of groups of five-year-old children attending mainstream schools. We can then compare dental health between different areas and with results we found from previous surveys.

You gave your agreement for your child to have dental checks in school and this letter tells you about this year's dental survey of five-year-olds which is planned to take place on ……..…….. The children taking part will have a simple examination at their school when a dentist and assistant who are trained to do this work will visit. The dentist will use fresh disposable gloves and sterilised mirrors for each child. The check takes only a few minutes and we will let you know if we find anything wrong. We would be pleased to see you at the school if you would like to be present.

No treatment will be provided, just a quick examination. All children still need to visit their own dentist for regular check-ups.

If you wish to withdraw your consent at any stage please contact the school or the number given below.

This website contains details of how this year's survey will be conducted and reports of previous surveys of children and other groups in the population:
http://www.nwph.net/dentalhealth/

The anonymised results of the survey will be sent to the national Public Health England centre so that they can be compared with all other local authorities in England. The findings may be published in a scientific journal but no individual will be identifiable and the analysis and reporting will be carried out on groups.

As part of the survey we will be asking the school to share information they already have, including name, date of birth, home postcode and ethnic group. The information about your child will be stored in a computer file which will be password protected and only dental staff and Public Health England staff will have access to it. This will allow information about dental health to be linked with a dataset containing height and weight information and allow better understanding about these two conditions and see if they are connected.

Thank you for reading this information sheet. If you have any questions please contact …….

If you wish to withdraw your child from the survey or if you do not agree to their information being linked to other datasets please contact the school.

Yours sincerely

Clinical Director

Appendix Lii. Statement and consent signing section for use where school based block signing systems are in place

CONSENT FORM for Public Health England dental public health epidemiology programme, oral health survey of five-year-old children, 2016-17.

I have had the opportunity to see the information letter about the 2016/2017 oral health survey of five-year-olds. I am aware that I should continue to take my child for routine dental care.

My child's name is (insert name)…….. Class ……

Please tick appropriate box below:

Yes, I agree to my child taking part in dental surveys ☐ ➡ and, yes, I agree to their information being safely linked to other datasets ☐

No, I do not want my child to be included ☐

Signed……(parent or guardian) Date ……

Name (block capitals) ……

Appendix M. Tracking list for schools to record which children have returned consent forms

PHE dental public health epidemiology programme, 2016-17
Return of consent forms - Class ……

Child's name	Tick when form returned	Notes

Appendix N. Maximising consent returns (excerpt from *The good practice guide for dental epidemiology. Advice and guidance for local authorities and other stakeholders*).

The value of epidemiological surveys is maximised if high proportions of potential participants agree to take part. Dental surveys of five-year-old children in England require parents to give written consent and there are varied levels of response for each school and each local authority. Non-return of consent forms is far more prevalent than parents refusing to give consent so action by a range of agencies should focus on encouraging parents to return completed forms. Local authorities, fieldwork teams and schools all have a role here.

What can local authorities do?

Local authorities can play a key role in engagement with schools via the directorate responsible for schools and education. A letter of support for the survey from the relevant director and director of public health outlining the purpose of the survey, details of data-sharing arrangements in place and encouraging general support for the survey can usefully alert headteachers and decision makers to the survey before fieldworkers attempt initial contact. This should ideally be addressed by name to the head of each sampled school a week or two in advance of contact being made with schools by fieldwork teams.

Local authorities could ensure information about the surveys is published on their websites and is visible in community and health centres local to schools taking part in the survey. If a member of the public health team in the local authority leads on oral/dental health, this person should be well informed about the purpose and general running of the survey and be able to answer any related queries or forward these to the relevant fieldwork team.

Many local authorities contract an oral health improvement worker or team and these should be included in discussions with the fieldwork team as early as possible as they are likely to have useful links within the community. Finally, with school nurses and health visitors now falling under the remit of local authorities there may be opportunities in the future for involvement of these groups in maximising consent returns.

Efforts to maximise consent returns should be at the school level (requiring co-operation from heads of school and from all staff involved in the delivery of consent forms) and at the level of parents and guardians of children to be surveyed. Reasons for non-participation at the school level include non-receipt of information by decision makers, concerns or confusion over data-sharing agreements, high workload of staff and lack of clarity over what the survey involves. Reasons for non-participation by parents and guardians include non-receipt of information, issues with language or literacy and low engagement with dental services in general.

What can fieldwork teams do?

Whilst there is no single solution that can overcome issues associated with poor consent return levels, a number of strategies have been found to positively impact on the response. Improvements of 12–22% in overall consent returns have been achieved by implementing some of the points below.

One of the principal reasons for reduced consent rates is due to non-return of forms irrespective of whether parents have chosen to consent to the survey or not. Practical experience has shown that school administrative processes and even individual staff within school offices can make the difference between success and failure in getting forms back from parents. Evidence has also shown that schools in some of the most deprived areas can achieve high levels of consent and the reverse seems to hold equally true. Developing a working relationship between the fieldwork team and the school is essential.

Planning and resourcing the effort

Where feasible, advanced agreement should be sought to ensure sufficient fieldwork staff are available to resource the consent process. It may be more efficient to concentrate resources over a short pre-determined time period, within which forms will be distributed and collected. A timetable of when each stage of the consent process will be undertaken could be used to allocate staff for shorter periods of time.

Communication with schools

Consent rates from previous surveys can be used to determine non-participating schools and those with historically low returns. A separate plan can then be devised to target these schools with additional administrative support. This has been shown to increase consent by up to 22% through developing a named point(s) of contact with whom regular communication is maintained. Experience suggests that meeting staff in person, rather than over the phone, is more likely to lead to a good working relationship.

The information sheet included in the protocol can be used and enhanced by adding in what steps the fieldwork team will take to support the school to optimise the return of consent forms. If a school has been sampled previously it may help to show the previous consent level in comparison with others.

It may be helpful for fieldwork teams to make reference to Ofsted's statement that applies:

Example text in relation to Ofsted:

> "School attainment and health are closely linked. Children's health and wellbeing is an important area of Ofsted inspections and inspectors will continue to monitor this as part of the common inspection framework.

Working with health providers, including through measuring and screening, can be an important way of demonstrating a focus on pupil health and wellbeing and can be used to inform parents and local communities about how successful the school is. This then has the potential to impact positively on the Ofsted inspection."

Administering the forms

Persistence is crucial as follow-up of non-responding and poor consent return schools will yield increased responses. Competing priorities in schools may mean forms are forgotten, left undistributed or are collected at the class level but not returned to the administrative office. Experience has shown that splitting the locality into areas and targeting each area in turn can be helpful in scheduling delivery and follow up.

Key actions

A number of simple tips can also assist schools in supporting the consent process. Some are more resource intensive than others but again the important points are persistence and working to lessen the impact on the school:

- Ask the school for a named point of contact with whom to liaise on matters relating to consent
- Recruit a named person at a school who can speak with parents and chase up non returns, (eg school nurse, family liaison worker, classroom assistant or parent volunteer)
- Provide materials in suitable format to publicise the survey to parents in newsletters, emails or posters on display in the school
- Use a table like that provided in the protocol to provide schools with written checklists of pupil names already divided by class list for ease of use. This should show which children have been sent consent letters and have a column to record returns
- Provide a clearly labelled, large collection envelope for returned forms with simple step-by-step instructions on it
- Ask schools about parent evenings or similar events where parents could be asked to consent
- Provide schools with spare forms and take copies along when visiting schools, delivering by hand whenever possible
- Consider whether posting letters and consent forms to home addresses with stamped, addressed envelopes may help if schools feel unable to directly support the process themselves
- Consider handing letters and consent forms directly to parents at pick-up time
- Consider aligning with signing for other health issues by parents at start of school

Appendix O Data collection sheet 2016-17 survey of five-year olds

1. Lower-tier local authority name _____ 2. Examiner _____

3. School name _____ 4. School Postcode |__|__|__|__| |__|__|__|

5. Date of examination |_d_|_d_|_m_|_m_|_y_|_y_|_y_|_y_|

Lower-tier LA Code | Number of sampled child

6. Child identity number |____|____|____|____|____|____|____|____|____|____|____|____|

7. Date of birth |1|5|_m_|_m_|_y_|_y_|_y_|_y_| 8. Home postcode |__|__|__|__| |__|__|__|__|

9a. Higher Ethnicity |__| See 10.10 9b. Lower Ethnicity |_____| See 10.10

10. Sample group code |__| 0 - Main sample 1 - Additional sample A 2 - Additional sample B
3 - Additional sample C 4 - Additional sample D 5 - Additional sample E

11. Examination status |__| 0 - Examined 1 - Repeat exam 2 - Training
3 - Absent 4 - Child refused

12. Plaque measurement |__| 0 - Teeth appear clean 1 - Little plaque visible
2 - Substantial plaque visible 9 - No assessment could be made

Right **UPPER** **Left**

	E	D	C	B	A	A	B	C	D	E	
D											D
O											O
M											M
B											B
L											L

Right **LOWER** **Left**

	E	D	C	B	A	A	B	C	D	E	
D											D
O											O
M											M
B											B
L											L

Tooth Codes

Extracted caries.....	6
Unerupted or missing other.....	8

Surface Codes

Sound.....	-
Hard, arrested caries.....	1
Decayed.....	2
Decay + pulpal involvement.....	3
Roots only remaining…….	3
Filled and decayed.....	4
Filled.....	5
Filled, needs replacement.....	R
Obvious sealant rest'n.....	N
Sealed surface	$
Crown	C
Trauma.....	T
Unrecordable……..	9

14. Abscess / Sepsis present |__| 0 - Absent 1 – Present

Optional measures

15. Spare variable |__| 0 - 1 - 2 - 3 -

16. Spare variable |__| 0 - 1 - 2 - 3 -

17. Spare variable |__| 0 - 1 - 2 - 3 –

Appendix Pi. Overview list and examination day sheet – for hard copy use

PHE dental public health epidemiology programme, oral health survey of five-year-old children, 2016-17

Name of school …….. School postcode …… ….

Date of examination _ _ / _ _ / _ _ _ _ Name of school contact……Telephone number……..…

															Consent status – tick the box			Examination status of parental consented children – tick the box		
Child's names First Family name	ID Number (lower-tier LA code prefix then number of sampled child)												Date of birth dd/mm/yyyy	Postcode	Ethnic codes higher	lower	+ve consent provided	Form returned parental consent refused	No form returned	Examined	Child absent	Child refused

Appendix Pii. Illustration of Excel worksheet – collection of child details to allow data linkage and use as examination day sheet

Local Authority name																			These columns can be deleted before sending in form to DEC					These columns can be deleted before sending in form to DEC	
		Dental survey unique ID number																		Consent status			Examination status of parental consented children		
Child's first name (no middle names, please)	Child's surname (s)	Local authority number									Child sequence number				Complete date of birth dd	mm	yyyy	Home postcode part 1	Home postcode part 2	Ethnic code	+ve consent provided	Form returned consent refused	No form returned	Code E for examined	Code A for child absent	Code R for child refused

Appendix Q. Illustration example of Excel worksheet for summary information

E01000007	Derbyshire				State mainstream primary schools listed by local authority				Number of children with :			Number of children WITH parental consent :		
Lower Tier LA Code	**Lower Tier LA Name**	**Name of examiner**	**Start date of examinations dd/mm/yyyy**	**End date of examinations dd/mm/yyyy**	**Total number of schools**	**Number of schools visited**	**Total number of 5-year-olds attending**	**Number of children from whom consent sought (sample size)**	**Parental consent supplied**	**Parental consent refused**	**Form not returned**	**Examined**	**Child absent**	**Child refused**
E07000032	Amber Valley	A.N.Other	12/10/2016	03/04/2017	54	20	2784	375	287	21	67	267	16	4
E07000033	Bolsover	A.N.Other	06/11/2016	02/03/2017	18	18	1500	320	260	12	48	240	17	3
E07000034	Chesterfield	A.N.Other	25/10/2016	03/05/2017	25	22	2023	350	300	23	27	264	36	0
E07000035	Derbyshire Dales	A.N.Other	15/11/2016	19/12/2016	40	21	2542	365	285	15	65	258	23	4