

Africa Centre Demographic Information System (ACDIS)

Analytical Dataset Specification/Documentation

Change History

<u>Who</u>	<u>When</u>	<u>What</u>
Colin Newell	16 th April 2006	Original (after document by Vicky Hosegood/Emily Freeman)
Colin Newell	25 th April 2006	Added new variables for ICD-10 code descriptions.
Colin Newell	2 Aug 2007	Added DTN form image. And a few label variables
Colin Newell	14 th March 2009	Added <i>IsMaternal</i> and renamed <i>IEndDate/IStartDate</i> to <i>DateOfDeath/DateOfBirth</i>
Colin Newell	4 October 2009	Added comment that <i>IsMaternal</i> is, despite its name only an indication the woman was pregnant at or recently before the death, not any indication that the death was actually “maternal” i.e. due to the pregnancy.
Colin Newell	19 th December 2009	Replaced form image with 2010 version. Cosmetic changes only.

Dataset name	Deaths
Description	<p>Includes most, but not all information collected via the DTN form. It also contains some information from the Verbal Autopsy ('VA') visit. However, there is a (deliberate) time-lag of 6 months+ between the DTN and the VA visit, so the VA data are less complete.</p> <p>ICD-10 definitions:</p> <p>The underlying cause of death is the disease or injury that initiated the chain of events leading directly to death.</p> <p>An associated or contributory cause of death is a significant condition that unfavourably influences the course of the morbid process and thus contributes to the fatal outcome, but which is not related to the disease or condition directly causing death.</p> <p>The immediate cause of death is the final disease (condition) or complication that occurred closest to the time of death and directly causes the death.</p> <p>The underlying cause is of most public health importance and is the one usually used for tabulation of mortality statistics</p>
Rows/Units of analysis	Contains one record for each individual registered in ACDIS for whom a Death Outcome Notification Form ("DTN") has been recorded. i.e. the "End Type" of the individual is 'DTH'.
Unique identifier(s)	llntld
Approx. number of rows	Approaching 12,400 at Mar09



Section 1. Identification Details

Form completed by: DSS Fieldworker Perinatal supervisor Other
 DSS Supervisor VA Nurse

BSID _____ DSID _____

Name of deceased _____
(Surname, Firstname)

Date of Visit YYYYYYMMDD Staff ID _____

Date of Death YYYYYYMMDD

Date of Birth YYYYYYMMDD

Sex Female Male

Residency status Resident Non-Resident

Informant

Mother Visit ref.# _____ VISIT TYPE _____
 Household head
 Household member -B
 Main caregiver -B +/or C B TempID/DSID _____
 Mbr of other HH at BS -B
 BS Owner C Details _____
 Other -B +/or C

Section 2. Place of death

1a. Where did name die?
 SETTING _____ DK CARE PROVIDER _____ DK LOCATION _____ DK BSID _____ DK or N/A

1b. Was the place a rural or urban area?
 Urban Formal Informal DK
 Rural Tribal area Commercial farm Other DK
 DK Specify area type _____

1c. Description of the place of death:

2. Was [NAME] admitted to Hlabisa hospital in the last 12 months?
 Yes
 No → Section 2
 DK

3. Do you have any Hlabisa hospital card or paper for [NAME]
 Yes, seen
 Yes, not seen
 No → Q5
 DK

4. RECORD ANY DETAILS FROM THE CARD OR PAPER, RECORD LAST ADMISSION DETAILS
 4a. Date of Admission YYYYYYMMDD
 4b. OPD No. _____ / _____
 4c. Regd. No. _____

5. When was [NAME] admitted to Hlabisa Hospital? YYYYYYMMDD

6. How long was [NAME] in Hlabisa Hospital before he/she died during his /her last admission _____ Months Weeks Days

Section 3. Other Details

1. WRITE A BRIEF DESCRIPTION OF THE CIRCUMSTANCES OF THE DEATH. RECORD THE SIGNS, SYMPTOMS AND THE TIME THEY APPEARED. YOU MAY USE CHARACTERISTIC ZULU EXPRESSIONS.

2. IN THE INFORMANT'S OPINION WHAT WAS THE CAUSE OF [NAME]'S DEATH? Informant's diagnosis _____

3a. Did [NAME] seek treatment during the past 12 months before they died for any illness/disability that may be related to the cause of death? e.g. chemotherapy for cancer, drug treatment for tuberculosis (TB)
 Yes, admitted to hospital
 Yes, treated as out-patient
 No
 DK

3b. Write a brief description of where and when they had treatment. Record name or type of medicine. Include emergency care immediately prior to death.

Section 4. Maternal Death Enquiry

1. Was [NAME] a woman between 15 and 49 years of age? Yes
 No → Circle 7 and end
 DK

2. Was [NAME] pregnant at the time of her death? Yes → Circle 1 and end
 No
 DK → Q4

3. Did [NAME] have a birth, miscarriage or abortion in the three months before her death? Yes → Circle 2 and end
 No → Circle 0 and end
 DK → Q4

4. Did [NAME] have her last menstrual period in the 30 days before her death? Yes → Circle 0
 No → Circle 8
 DK → Circle 8

Maternal death result:
 0 Non-maternal death circle code number
 1 Maternal death (antenatal)
 2 Maternal death (postpartum)
 7 Not applicable (Male or under 15 or over 50)
 8 Death of unknown type

Deaths Dataset Variable List

Variable Name	Description	Source in ACDIS database	Format/Codes/Special values	Notes/comments
IntId	Unique Internal Id of dead person	<i>RegisteredIndividuals.IntId</i>	Integer between 1 and approx 130,000	Primary Key. Used to link to Individuals data etc
DateOfDeath	Date of Death	The end date of the individual's episode. i.e. <i>Events.AssignedDate</i> of the Event linked to <i>RegisteredIndividuals.EndEvent</i>	General date Plus one refusal and one Don't know 1 Jan 1793 (Refused) 1 Jan 1798 (Don't Know)	Range is 1 Jan 2000 thru present, with the two refused/Don't know pre-1800 standard values
IEndInformantType	Informant's relationship to the dead person [from DTN form]	<i>RegisteredIndividuals.EndInformantType</i>	CRG Caregiver DFT _default HHH Household head HMB Household member MIS _missing MOH Member of other household MTH Mother NBR Neighbour OTH _Other PRT Partner SLF Self	Validates on <i>InformantTypes</i> table
IEndInformantTypeName	Label associated with previous variable	<i>InformantTypes.Name</i> associated with <i>RegisteredIndividuals.EndInformantType</i>	Text string	
DateOfBirth	Date of Birth	The start date of the individual episode i.e. <i>Events.AssignedDate</i> of the event linked to <i>RegisteredIndividuals.Delivery</i>	Date. From June 1896 to present No Missing or invalid values	Variable was once called <i>IStartDate</i>
DeathNotificationDate	Date of the Visit when the DTN form was completed	<i>Events.AssignedDate</i> of the event linked to the <i>Event.FirstRecorded</i> linked to the <i>RegisteredIndividual.EndEvent</i>	Date	
VisitType	Type of Visit at which the DTN form was completed	<i>Visits.Type</i> of the Visit linked to the <i>Event.FirstRecorded</i> linked to the <i>RegisteredIndividual.EndEvent</i>	For code translation see next variable.	Validates on <i>VisitTypes</i> table

Deaths Dataset Variable List

Variable Name	Description	Source in ACDIS database	Format/Codes/Special values	Notes/comments
VisitTypeName	Label associated with previous variable	<i>VisitTypes.Name</i> associated with <i>Visits.Type</i>	Text string	
DeathSetting	The 'Setting' where the individual died [From DTN form]	The Setting of the Contact linked to the Death i.e. <i>Contacts.Setting</i> associated with <i>Deaths.IntId</i>	For code translation see next variable	Validates on <i>Settings</i> table
DeathSettingName	Label associated with previous variable	<i>Settings.Name</i> associated with Death contact	Text string	
DeathCareProvider	Care provider for the deceased	<i>Contacts.CareProvider</i> of the Contact associated with the death	For code translation see Next variable	
DeathCareProviderName	Label associated with previous variable	<i>CareProviders.Name</i> associated with <i>Contacts.CareProvider</i>	Text string	
DeathLocation	Location type of death	<i>RegisteredPointLocations.Type</i> of RPL identified in <i>Contacts</i>	B Bounded Structure E External Facility X Not appl./Not asked	Blank if death NOT in a BS
DeathLocationName	Label associated with previous variable	<i>RPLTypes.Name</i> associated with previous variable	Text string	
DeathBSIntId	BSIntId of place where individual died	<i>RegisteredPointLocations.IntId</i> of RPL identified in <i>Contacts</i>	Integer in range 1 thru approx 15000; occasional 99998. many Null	Blank if death was not in a BS,
Death_BSIDIsUrbanOrRural	IS BS of death Urban or Rural	<i>RegisteredPointLocations.IsUrbanOrRural</i> of RPL identified in <i>Contacts</i>	DFT Default PER Peri-Urban RUR Rural URB Urban	Blank if death NOT in a BS. Can be used to link to BoundedStructures dataset
DeathPlaceDescription	Free text description of Place of Death	<i>OtherPlaces.DescriptiveName</i> linked to <i>Contacts.OtherPlaces</i> linked to Death	Free text or blank.	Blank if death IS in a BS
DeathPlaceIsUrban	Is the Non-BS location Urban?	<i>OtherPlaces.IsUrban</i> linked to <i>Contacts.OtherPlaces</i> linked to Death	N No, not Urban U Don't Know X Non-applicable Y Yes Urban/Peri-urban	

Deaths Dataset Variable List

Variable Name	Description	Source in ACDIS database	Format/Codes/Special values	Notes/comments
DeathPlaceIsFormal	Is the non-BS location Formal?	<i>OtherPlaces.IsFormal</i> linked to <i>Contacts.OtherPlaces</i> linked to Death	N No, not Formal T Other (!!) U Don't Know X Non-applicable Y Yes, Formal	
DeathPlaceIsInstitutional	Is the non-BSID location Institutional?	<i>OtherPlaces.IsInstitutional</i> linked to <i>Contacts.OtherPlaces</i> linked to Death	U Don't Know X Non-applicable	Why only U/X values??
IsMaternal	Despite its name, this only records whether the woman was pregnant at time of death or recently before, not any indication that the death was actually "maternal" i.e. due to the pregnancy.	<i>Deaths.IsMaternal</i>	0 Neither pregnant nor recent Delivery/Abortion 1 Pregnant 2 Delivery/abortion in last 90 days 7 Not applicable (i.e. not a female aged 15-59) 8 Don't know	New Mar09. Is 7 – Not Applic. for all males, and for females under 15 and over 59 BEWARE this is not an indication the death was due to maternal causes.
IsMaternalName	Label associated with previous variable	<i>DeathsIsMaternal.Description</i>	Text string	
VACODassigned	Has Cause of death been assigned via Verbal Autopsy process?	Set Yes if <i>Deaths.Status</i> = 4 (i.e. VA diagnosis verified.)	Y Yes N No	
ImmediateCauseCode	Immediate cause of death (see front page for ICD-10 definition)	<i>Deaths.ImmediateCause</i>	Any valid ICD-10 code. See next variable for associated name	Only 150-odd values in database. Validates on <i>ICD10codes</i> lookup table
ImmediateCauseDesc		<i>ICD10Codes.Description</i> linked to <i>Deaths.ImmediateCause</i>	'Official' IDC-10 description	

Deaths Dataset Variable List

Variable Name	Description	Source in ACDIS database	Format/Codes/Special values	Notes/comments
UnderlyingCauseCode	Underlying cause of death (see front page for ICD-10 definition)	<i>Deaths.UnderlyingCause</i>	Any valid ICD-10 code. See next variable for associated name	Populated from Verbal Autopsies. 5,000+ values at present. Validates on <i>ICD10codes</i> lookup table
UnderlyingCauseDesc		<i>ICD10Codes.Description</i> linked to <i>Deaths.UnderlyingCause</i>	'Official' IDC-10 description	
AssociatedCause1Code	Associated cause of death 1 (see front page for ICD-10 definition)	<i>Deaths.AssociatedCause1</i>	Any valid ICD-10 code. See next variable for associated name	Only a handful of values in database. Validates on <i>ICD10codes</i> lookup table
AssociatedCause1Desc		<i>ICD10Codes.Description</i> linked to <i>Deaths.AssociatedCause1</i>	'Official' IDC-10 description	
AssociatedCause2Code	Associated cause of death 2 (see front page for ICD-10 definition)	<i>Deaths.AssociatedCause2</i>	Any valid ICD-10 code.	Currently all blank. There are no data in database. Validates on <i>ICD10codes</i> lookup table
AssociatedCause2Desc		<i>ICD10Codes.Description</i> linked to <i>Deaths.AssociatedCause2</i>	'Official' IDC-10 description	

SQL

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/*
<Author>Colin Newell</Author>
<Date>6 April 2006</Date>
<Category>Dataset</Category>
<Notes>
Requested by Vicky Hosegood/Emily Freeman, March 2006

Request: To produce a _Deaths analytical dataset
The dataset should contain one record for each Registered
Individual for whom the End type of the individual is "DTH"
This is not quite the same as a list of DTN forms.

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</Notes>
<ChangeHistory>
C Newell    6 Apr  2006  Original coding

C Newell    31 Oct  2006  Turned dates from Text to date (ie. no conversion)

C Newell    11 Jun  2007  Trimmed ICD codes, many of which had trailing blanks

C Newell    16 Jul  2007  Added numerous 'label' cols. removed several useless ones

C Newell    14 Mar  2009  Added Ismaternal.
                          Also renamed IEndDate and IStartDate as DateOfDeath and DateOfBirth resp.

</ChangeHistory>
*/
ALTER VIEW _Deaths
AS
SELECT -- top 50
  ri.IntId AS IIntId,
  ee.AssignedDate AS DateOfDeath,           -- renamed 14mar09  -- IEndDate, -- aka Date of death
  ri.EndInformant AS IEndInformantId,
  ri.EndInformantType AS IEndInformantType,
  it.[Name] AS IEndInformantTypeName,      -- added cn 16jul07
  se.AssignedDate AS DateOfBirth,          -- renamed 14mar09 IStartDate,  -- aka Date of Birth
  ri.Sex,
  efr.AssignedDate AS DeathNotificationDate,
  ev.Type AS VisitType,                    -- of visit linked to death end event
  vt.[Name] AS VisitTypeName,
  c.Setting AS DeathSetting,
  cs.[Name] AS DeathSettingName,           -- cn 16jul07
  c.CareProvider AS DeathCareProvider,
  ccp.[Name] AS DeathCareProviderName,
  rpl.Type AS DeathLocation,
  rt.Name AS DeathLocationName,            -- cn 2aug07
  rpl.IntId AS DeathBSIntId,
  rpl.IsUrbanOrRural AS DeathBSIDIsUrbanOrRural,
  url.[Name] AS DeathBSIDIsUrbanOrRuralName,
  op.DescriptiveName AS DeathPlaceDescription,
  op.IsUrban AS DeathPlaceIsUrban,

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op.IsFormal AS DeathPlaceIsFormal,
op.isInstitutional AS DeathPlaceIsInstitutional,
-- d.VAVisit AS VAVisit, -- commented out cn 16jul07: Not useful to analysts
d.IsMaternal as IsMaternal, -- added 14mar09 cn
dim.Description AS IsMaternalName,

CASE
  WHEN d.Status = 4 THEN 'Y' -- i.e. Has VA Diagnosis been verified/completed
  ELSE 'N'
END AS VACODassigned,

RTRIM(d.ImmediateCause) AS ImmediateCauseCode,
icdIc.[Description] AS ImmediateCauseDesc,
RTRIM(d.UnderlyingCause) AS UnderlyingCauseCode,
icdUc.[Description] AS UnderlyingCauseDesc,
RTRIM(d.AssociatedCause1) AS AssociatedCause1Code,
icdAc1.[Description] AS AssociatedCause1Desc,
RTRIM(d.AssociatedCause2) AS AssociatedCause2Code,
icdAc2.[Description] AS AssociatedCause2Desc
FROM RegisteredIndividuals ri
LEFT JOIN Deaths d ON ri.EndEvent = d.IntId
LEFT JOIN Events ee ON ri.EndEvent = ee.IntId
LEFT JOIN Contacts c ON d.IntId = c.IntId
LEFT JOIN Settings cs ON c.Setting = cs.Code -- cn 16jul07
LEFT JOIN CareProviders ccp ON c.CareProvider = ccp.Code -- cn 16jul07
LEFT JOIN Visits ev ON ee.FirstRecorded = ev.IntId
LEFT JOIN VisitTypes vt ON ev.Type = vt.Code -- cn 16jul07
LEFT JOIN Events efr ON ev.IntId = efr.IntId
LEFT JOIN Events se ON ri.Delivery = se.IntId
LEFT JOIN RegisteredPointLocations rpl ON c.RegisteredPointLocation = rpl.IntId
LEFT JOIN RPLTypes rt ON rpl.Type = rt.Code -- cn 2aug07
LEFT JOIN UrbanRuralLookups url ON rpl.IsUrbanorRural = url.Code -- cn 16jul07
LEFT JOIN OtherPlaces op ON c.OtherPlace = op.IntId
LEFT JOIN ICD10codes icdIc ON icdIc.Code = d.ImmediateCause
LEFT JOIN ICD10codes icdUc ON icdUc.Code = d.UnderlyingCause
LEFT JOIN ICD10codes icdAc1 ON icdAc1.Code = d.AssociatedCause1
LEFT JOIN ICD10codes icdAc2 ON icdAc2.Code = d.AssociatedCause2
LEFT JOIN InformantTypes it ON ri.EndInformantType = it.Code
LEFT JOIN DeathsIsMaternal dim ON dim.Code = d.IsMaternal -- cn 14mar09

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WHERE ee.Type = 'DTH' -- i.e. End Event of this Registered Individual is Death.
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