

CARPHA Technical Support to Strengthen Mortality Surveillance Systems

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Preventing disease, promoting and protecting health



Mortality Coding Training Activities

- ICD-10 mortality coding and underlying cause of death selection
- Automated mortality coding: Mortality Medical Data System (MMDS)



Physician Training Activities

- Instructional video on the correct completion of the medical cause-of-death certificate
- Facilitate face-to-face sessions

Mortality-Related Training Activities

Country	Year									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Regional mortality coding workshop										
Anguilla						*		*		+
Antigua & Barbuda			*			*		*		
Aruba						*		*		
Bahamas						*		*		
Barbados			*			*		*		
Belize			*			*		*		
Bermuda			*			*		*		
Bonaire, Saba, St. Eustatius										+
British Virgin Islands						*		*		
Cayman			*			*		*		
Curacao			*					*		
Dominica			*			*		*		
Grenada			*			*		*		
Guyana								*		
Haiti										+
Jamaica			*			*		*		
Montserrat			*			*		*		
St. Maarten								*		
St. Kitts & Nevis			*			*		*		
St Lucia			*			*		*		
St. Vincent and the Grenadines			*			*		*		+
Suriname						*		*		
Turks and Caicos Islands						*		*		+
Trinidad & Tobago			*			*		*		

	Mortality coding
	MMDS
	Physician training

Technical Support to CMS



- In-country support:
 - National mortality surveillance system evaluations and mortality data audits
 - Support to complete processing of cause-of-death certificates (data entry, coding, data analysis) as needed.
- Remote technical support:
- Coordination of the Caribbean Mortality Coders Network
 - Troubleshooting on mortality coding and software-related issues.

Audits and Evaluations


Country	Year									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Anguilla										
Antigua & Barbuda										
Aruba										
Bahamas										
Barbados										
Belize										
Bermuda										
Bonaire, Saba, St. Eustatius										
British Virgin Islands										
Cayman										
Curacao										
Dominica										
Grenada										
Guyana										
Haiti										
Jamaica										
Montserrat										
St. Maarten										
St. Kitts & Nevis										
St Lucia										
St. Vincent and the Grenadines										
Suriname										
Turks and Caicos Islands										
Trinidad & Tobago										

	Audit and Evaluation
	Follow-up visit

- An in-house national mortality data capture and reporting system (Mortbase) developed:
 - Currently being used in at least 10 CMS
 - New version developed and currently implemented in Aruba

Reporting		
Record Listings	Records with errors in current year	
Underlying Cause of Death	Global burden of disease ICD-10 Group	WHO Age Grouping (Pa
	Leading Cause ICD-10 Grouping	
	Global burden of disease ICD-10 Grouping	
	Three(3) character grouping ICD-10 Grouping	
	Underlying cause ICD-10 Grouping	

Application Tools – Mortbase 7



Mortality

This functional feature manages Mortality. It allows the user to create, edit or delete medical death records.

Data Collection

- CMS submit annual mortality data to CARPHA
- Data are validated in conjunction with focal persons in member states
- Data are collated and stored in the CARPHA regional mortality database.



	Data submitted and validated
	No individual data available for the period
	Data submitted and pending validation by CARPHA
	Pending final corrections by country
	XXXX No data received

15-Aug-14

CARPHA Mortality Log



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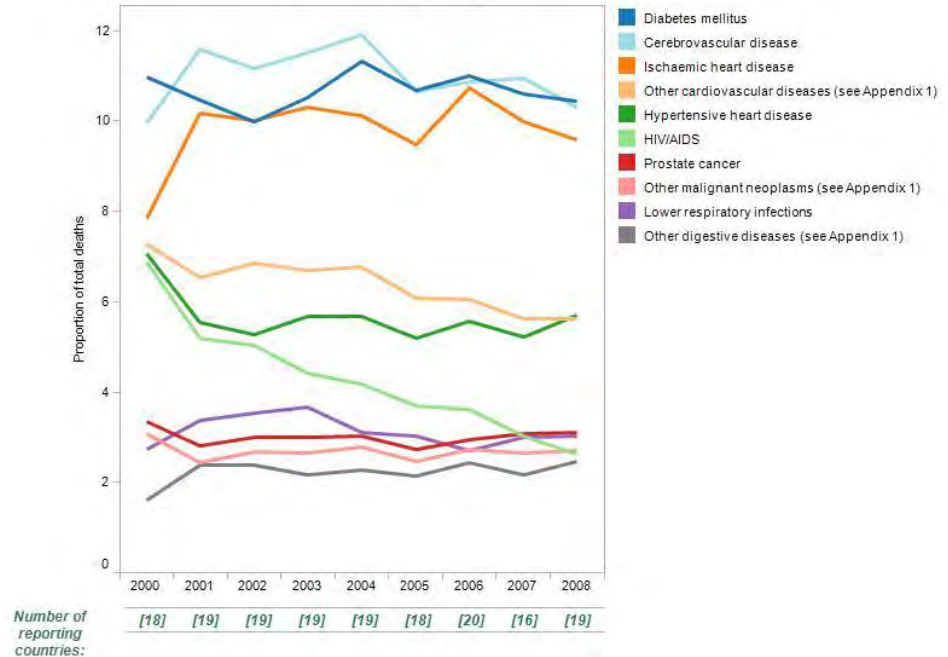


Outputs

Production of routine cause-of-death reports, publications and conference presentations

Data shared with PAHO/WHO routinely, for inclusion in reports for the Americas and for submission to WHO.

Figure 1: Top ten leading causes of death in the English- and Dutch-speaking Caribbean 2000-2008



National cause-of-death data in the English- and Dutch-speaking Caribbean, 2000-2010: A quality assessment

59th Annual CARPHA Health Research Conference

S Quesnel-Crooks, A Hinds, E Bissessarsingh, N Elias

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Anguilla	31%	48%	32%	39%	17%	16%	21%	15%	16%	13%	12%
Antigua/ Barbuda	22%	26%	24%	27%	24%	32%	30%	19%	25%	23%	
Aruba	41%	32%	29%	27%	32%	27%	31%	27%	31%	28%	27%
Bahamas	15%	17%	26%	17%	15%	16%	16%	17%	16%	15%	17%
Barbados	27%	29%	28%	30%	35%	31%	23%	21%	24%	23%	22%
Belize	30%	29%	24%	26%	26%	23%	22%	25%	21%	15%	15%
Bermuda	14%	17%	13%	13%	13%	15%	19%	18%	16%	21%	21%
British Virgin Islands	41%	29%	29%	29%	35%		38%		36%	35%	22%
Cayman Islands	19%	31%	21%	15%	15%		28%	30%	23%	30%	19%
Dominica		37%	38%	36%	33%	19%	15%	23%	21%	21%	20%
Grenada	21%	31%	27%	31%	27%	22%	24%	23%	29%	24%	19%
Guyana	13%	19%	17%	14%	16%	14%	16%	17%	17%	22%	20%
Jamaica	25%	31%	34%	25%	20%	22%	15%	15%	16%		
Montserrat	22%	33%	29%	21%	41%	29%	21%	39%	18%	25%	13%
Netherlands Antilles	24%										
St. Kitts/ Nevis	39%	46%	35%	36%	38%	26%	20%	15%	14%	16%	14%
St. Lucia	27%	24%	28%	27%	26%	34%	31%	27%	28%	17%	22%
St. Vincent/ Grenadines	19%	21%	19%	19%	16%	19%	12%	13%	22%	29%	21%
Suriname	26%	23%	23%	21%	25%	24%	19%	20%	21%	20%	21%
Trinidad/ Tobago	12%	13%	11%	11%	12%	12%	13%	14%	14%		
Turks and Caicos Islands	31%	41%	30%	43%	45%	43%	45%	49%	45%	21%	

Number of countries targeted by CARPHA Initiatives

0	0	0	0	0	13	3	18	4	4	20
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Notes: Blank squares indicate missing cause-of-death data

Legend: Proportion of deaths attributed to GCs



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2014/2015 Activities

- Continuation of routine activities:
 - Physician training in correct completion of cause-of-death certificates
 - Training for ICD-10 mortality coding.
 - November 2014: ICD-10 mortality coding and Underlying Cause of Death selection training workshop for **first time** coders. Proposed CMS:
 - Anguilla, Bonaire/Saba/St Eustatius/Curacao, Haiti, St. Vincent & the Grenadines, Turks & Caicos Islands
 - Evaluation of national mortality surveillance systems and audits of coded data
 - Data collection, validation, collation
 - Analysis and Dissemination

2014/2015 Activities

- WHO-FIC Country Implementation Database
 - Information on FIC implementation in each of your countries
 - Dr Huib Ten Napel, Affiliated Head of the WHO FIC Collaborating Center in the Netherlands
 - Instructions to participate in this process will follow

2014/2015 Activities

- **ICD-11** The International Classification of Diseases 11th Revision is due by 2017



Participate in the ICD Revision

Beta phase participants will have the opportunity to:

- Make **Comments**
- Make **Proposals**
- Propose **definitions** of diseases in a structured way
- Participate in **Field Trials**
- Assist in **translating** ICD into other languages

<http://www.who.int/classifications/icd/revision/en/>



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2014/2015 Proposed Activities

- Roll out Mortbase 7
- Pilot of the automated coding software **IRIS** in 2 CMS
 - IRIS replaces MMDS; system incorporates WHO updates
 - Language independent



Session Agreements and Recommendations

CARPHA Activity	2014	2015	2016
Physician training in correct completion of cause-of-death certificates			
Evaluation of national mortality surveillance system			
Training for new coders – November 2014	ANG, BES/CUR, HAI, SVG, TCI	-	
Mortbase 7	DOM	2 CMS	
Participation in WHO-FIC Country Implementation Database	ALL	ALL	
Pilot IRIS	-	2 CMS	
ICD-11			