Table 1: Study Characteristics *Population-based studies* 

Author(s)	Study Type	Sample Selection	Sample Size	Survey Methods	Included/Excluded	<u>Validation Tools</u>	Pre-War Data Comparison
Roberts 2004	Survey-based; cluster sample survey (before and after comparisons), no stratified sampling.	Sample households and start household randomly selected by cluster sampling. Clusters assigned to paired Governorates (to minimize travel time) by probability proportional to size.  Start household randomly selected by GPS navigation system and following households selected using a rule of proximity.	33 cluster areas with 30 households and estimated 7 members each were randomly selected from paired Governorates.  33 cluster areas, 983 households and 7868 members were surveyed; 5 households refused to participate.	Team of bilingual researchers, including both males and females, conducted household interviews on deaths, births and household visitors.	All deaths included.  Falluja excluded as an outlier in some data calculations.	Death certificates sought for 2 deaths in each cluster; produced in 81% of cases where requested.	Mortality rates were calculated for period pre-invasion and post-invasion based on the survey results (to Sept. 2004). The CMR for the pre-war period was 5.0.  The excess mortality in post-invasion period was calculated based on modelling relative risk of death pre- and post-war in each cluster.
Iraq Living Conditions Survey 2004	Survey-based; multi- stage cluster sample survey.	Cluster sample, with household selection at the last stage based on sub-segmentation, mapping and systematic sampling of chosen segment (community within which cluster was to be drawn). Explicit stratification with post-sampling weighting.	1,100 households selected from each Governorate; Baghdad included 3,300 households.  A total of 22,000 households were selected; 21,668 were actually interviewed.	Survey was conducted in both Arabic and Kurdish.  Two questionnaires were administered: 1) to the recognized head of the household related multiple indicators and 2) to women of the household, aged 15-45 related to reproductive and children's health.	All deaths included. Includes Kurdish areas.	Information sent to Governorate office for registration and inspection.  Quality control done during coding and data entry in Baghdad.  Where/if needed, reinterviewing was done; in some cases, such as for <5 mortality, a 50% under-reporting was noted.  Completed files sent to headquarters in Norway for quality checks.	N/A
Burnham 2006	Survey-based; multi- stage cluster sample survey (before and after comparisons), no stratified sampling.	Cluster sampling, start household selected by random selection of main streets then residential streets within community and random selection (by number assignment) of one household along the chosen street; remaining households selected by a rule of proximity (each adjacent one).	50 clusters with 40 households randomly selected by Governorate, population proportional to size.  47 clusters of 40 households, 1849 households and 12,801 members included in final data analysis; 15 households refused to participate. 3 clusters were misattributed due to miscommunication and security issues and were excluded from the final	Team of bilingual researchers, including both males and females, conducted household interviews on deaths, births and migration in/out.	All deaths included.	Deaths confirmed reported by death certificate.	Mortality rates were calculated for the period pre-invasion and at approximately one year intervals in the years following, based on the survey results. The CMR for the pre-war period was 5.5.  The excess mortality in post-invasion period was calculated based

			sample.				on modelling relative risk of death pre- and post-war in each cluster.
Opinion Research Business 2007	Survey-based; multi- stage random probability sample in 15 of 18 governorates.	Representative sample size selected through random probability sampling from 2005 census information that indicates there are a total of 4,050,597 households across Iraq.	1,720 households selected; 1,499 agreed to participate.	Face-to-face interviews conducted; interviewers asked: "How many members of your household, if any, have died as a result of the conflict in Iraq since 2003 (i.e. as a result of violence rather than a natural death such as old age)? Please note that I mean those who were actually living under your roof."	Karbala and Al Anbar excluded due to insecurity; Irbil did not grant permit.	Information not provided.	N/A
Iraq Family Health Survey 2008	Survey-based; cross- sectional, two-stage stratified, nationally representative sample household survey (before and after comparisons)	Governorates divided into 3 sampling domains each (Baghdad divided into 5) and each sampling domains further stratified into clusters; households were selected from each cluster using linear random systematic sampling.	There were a total of 56 sampling domains that were stratified into 18 clusters and 10 households selected from each cluster; target sample was 10,080 households, but additional clusters were added to Baghdad-Karkh, Anbar and Nineveh domains to account for likely inaccessibility due to insecurity.  Total of 1086 clusters and 10,860 households selected; 9710 households were visited and 9,345 interviews conducted.	Survey was translated in Arabic and Kurdish.  Teams included both males and females conducted household survey/interviews.  Three questionnaires were administered: 1) general questions, 2) mental health, and 3) women's health.	115 clusters in Anbar, Baghdad, Nineveh, and Wasit not visited due to insecurity.	Questionnaires and forms sent to Federal Ministry of Health in Iraq for verification; incorrect or incomplete forms sent back to respective governorates.  Data double entered and verified.	Mortality and morbidity rates for pre- and post-invasion periods were calculated. The CMR pre-invasion was 3.17.  The VMR was calculated after accounting for sampling errors and adjusting for missing clusters.

Table 2: Study Characteristics

Passive reporting – published studies

Author(s)	Study Type	Data Source	<u>Methods</u>	Included/Excluded	Validation Tools
PDAR	Surveillance-based;	Published – reports on secondary info	Analysis and synthesis of: journalistic surveys of casualty	Includes deaths that occurred during the "war"	Determined by source
	mixed-methods.	source.	incidents, hospitals, burial societies, and graveyards, media	(presumably up to official US declaration that combat	information.
2003			and NGO reports of compilations of individual casualty	had ceased, May 2003)	
	Analysis and synthesis of		incidents including and based on testimony from		
	information from several		eyewitnesses, hospital personnel, aid workers, and the		
	sources		families of the dead. Combat deaths derived largely from		
			embedded journalists and interviews with military personnel.		
UNAMI	Facility-based; reported	Published – reports from primary info	Deaths reported by MOH derived from hospitals in all	MOH reports excluded Region of Kurdistan.	Confirmed deaths at
	deaths.	source.	Governorates.		hospitals and bodies arriving

2006	Synthesis of deaths reported by Ministry of Health and Medico- Legal Institute of		Deaths reported by M-LIB.  Reported deaths for each combined to produce total deaths.		at M-LIB.
Brookings Institute 2008	Baghdad (M-LIB) Surveillance- and facility-based; mixed-methods.  Synthesis of variety of sources of information	Published – reports from secondary info source.	Combatant death data comes from Iraq Minister of Interior, military personnel and media reports.  Non-combatant death data combines IBC as base data and increases by a factor of 1.75 (to account for the differences between the IBC and Ministry of the Interior figures) then combines with deaths estimated from crime rate analysis; the later period is based on UNAMI reports.  For the period from January to December 2007, based on U.S. State Department Weekly Status Report, September 12, 2007	Civilian and military/police deaths reported separately; police and defense forces removed from civilian death totals.  Total deaths not provided; have not been added together given different time periods.	Not able to determine.  Based on rigor of source reports compiled.
Iraq Body Count Ongoing (info collected January 2008)	Surveillance-based; mixed-methods. Synthesis of media reports and eyewitness accounts	Published – reports from secondary info source.	and press briefings.  Survey of online (English language sites) newsgathering agency reports and eyewitness accounts.  Ranges given for discordant reports.  Reporting agency must meet base standards outlined.  Numbers must be independently reported by 2 or more agencies.	Includes only civilian deaths due to violence resulting from coalition military intervention, including insurgent and terrorist attacks and increased crime rate that resulted.	Must be independently report by 2 or more agencies.  Relies on rigor of reporting agency.  Reports are independently checked by 2 IBC staff and original compiler.
Just Foreign Policy 2008	Survey- and surveillance-based; mixed-methods. Combination of Burnham et al. study results and IBC	Published – based on primary research report plus secondary info source.	Combines the results of the Burnham et al. study with ongoing totals from the Iraq Body Count.  Formula is:  [Burnham et. al estimate as of July 2006] x [ (Current IBC Deaths) / (IBC Deaths as of July 1, 2006) ]	Includes civilian deaths due to violence.	Only as done through base studies and reports.

Table 3: Study Characteristics

Passive reporting – unpublished studies

Author(s)	Study Type	Data Source	<u>Methods</u>	Included/Excluded	Validation Tools
People's Kifah	Survey- and facility-	Unpublished – media reporting on	Volunteer based nation-wide survey gathering information	Includes civilian deaths only.	Not able to determine.
2003	based; mixed-methods.	secondary info source.	from villages, towns and cities.	Excluded Kurdish areas.	
2003	Compilation of reports,		Hospital information.	Encladed Flateristic areas.	
	interviews and personal accounts		Interviews with grave-diggers.		
			Eye-witness accounts.		
Iraqiyun	Survey- and	Unpublished – media reporting on	Information gathered from relatives.	Only violent deaths included.	Not able to determine.
	surveillance- based;	secondary info source.			

2005	mixed-methods		Information gathered from hospitals across the country.	Only deaths where relatives have been informed, not including abducted, assassinated or disappeared.	
Iraq Ministry of Health 2006	Facility-based; reported deaths in Baghdad area.	Unpublished – media reporting on primary info source.	75-100 deaths per day reported at morgues and hospitals in Baghdad.	All deaths due to violence.	Not able to determine.  Based on count of dead
2006	Death rates reported to Ministry; data		Current daily death rate extrapolated to determine total death estimate since 2003.		bodies.
	extrapolation since March 2003 for total mortality figures				Confirmed by Ministry staff.