Table 1. General information

Part	Number	Data Element	Code type	choice	Variable Code	Variable	Definition
General information	A00_01	Name of EMS agency	text			EMS agency is defined when the agency operates EMS service by own its resources	The formal name of the agency
	A00_02	Name of Country	text				The formal name of the country
	A00_03	Population	text			*1000	The total population in the agency's service area based on year 2000 census data (if possible). This number does not include population changes associated with daily work flow or seasonal movements
	A00_04	Year of survey	text			Year of census	The year of census
	A00_05	Service Area	text			Km^2	The total square kilometers in the agency's service area
	A00_06	Service Area Urbanization	combo	multiple	1	Urban	Agglomerations of 2,500 or more inhabitants, generally having population densities of 386 persons per square kilometer (1000 per square mile) or more.
					2	Suburban	
					3	Rural	Open country and settlements with fewer than 2,500 residents; areas designated as rural can have population densities as high as 999 per square mile or as low as 1 person per square mile.
					4	Wildness	A natural environment on Earth that has not been significantly modified by human activity
	A00_07	Population density	text			Regional population/Km^2	The number of persons per square kilometer in the service area
	A00_08	Level of Service	combo	single	1	EMT-Basic	The highest credentialed personnel's level of service which the agency provides for every EMS encounter if requested. In a tiered response system, this is the highest level of service which could be sent to any specific call.
					2	EMT-Intermediate	
					3	EMT-Paramedic	
					4	Nurse	
					5	Physician	
					6	First Responder	
	A00_09	Organization Type	combo	multiple	1	Community, Non-Profit	The organizational structure from which EMS services are delivered.
					2	Fire Department	
					3	Governmental, Non-Fire	
					4	Hospital	
					5	Private, Non-Hospital	
					6	Tribal	
	A00_10	Organization Status	combo	single	1	Mixed	The primary organizational status of the agency. The definition of Volunteer or Non-Volunteer is based on state or local terms.

Part	Number	Data Element	Code type	choice	Variable Code	Variable	Definition
					2	Non-Volunteer	
					3	Volunteer	
	A00_11	Service Fee	combo	multiple	1	Free and tax based	Where the main budget of EMS comes from
					2	Free and reimbursed by public insurance	
					3	Free and reimbursed by private insurance	
					4	Paid by patient	
	A00_12	Ambulance Operation	combo	single	1	Mixed	whether an ambulance stays at the same place (station) to standby, or moves to other points (or stations) based on the shift or the day-of-week.
					2	Fixed	
					3	Dynamic	
Dispatch	A00_12	Dispatch Center Operation	combo	single	1	Fire	The organization who operates the dispatch center
					2	Police	
					3	Non-fire and Non-police public	
					4	Private	
	A00_13	EM Dispatcher	combo	single	1	Certified	
					2	Non-certified	
					3	Mixed	
Tiered system	A00_14	Tiered Response	combo	single	1	BLS single	The service level provided by EMS
					2	BLS+ALS	
					3	ALS single	

Table 2. Structure

Part	Number	Data Element	Code type	choice	Variable Code	Variable	Definition
Structure	B00_01	Survey year	text				The year in which the followings were investigated
Human Resources	B00_02	Human Resource (Number), Total EMS Agency (Full time)	text				The total number of work forces working full-time in the EMS agency
	B00_03	EMT-basic (number) (full time)	text				The total number of full-time employees in the EMS agency with EMT-basic certification or similar level of training
	B00_04	EMT-intermediate (number) (full time)	text				The total number of full-time employees in the EMS agency with EMT-intermediate certification or similar level of training
	B00_05	EMT-paramedic (number) (full time)	text				The total number of full-time employees in the EMS agency with EMT-paramedic certification or similar level of training

Part	Number	Data Element	Code type	choice	Variable Code	Variable	Definition
	B00_06	Nurse (number) (full time)	text				The total number of full-time employees in the EMS agency with registered nurse certification or similar level of training
	B00_07	Physician (number) (full time)	text				The total number of full-time employees in the EMS agency with medical doctor certification or similar level of training
	B00_08	First responder (number) (full time)	text				The total number of full-time employees in the EMS agency with the level of first-responder training
Ambulance	B00_09	BLS Ambulance (Number)	text				The number of BLS vehicles
	B00_10	ALS Ambulance (Number)	text				The number of ALS vehicles
	B00_11	Helicopter Ambulance (Number)	text				The number of helicopters
	B00_12	Fixed Wing Airflight (Number)	text				The number of fixed-wing planes
	B00_13	Motorcycle (Number)	text				The number of motorcycles
	B00_14	Ship Ambulance (Number)	text				The number of ships
	B00_15	Bicycle (Number)	text				The number of bicycles
	B00_16	Quick Response Vehicle (Non-Transport Vehicle other than Fire Truck (Number)	text				The number of quick response vehicles not equipped for patient transportation. Fire trucks are not counted in.
	B00_17	Ambulance Station (Number)	text				The number of ambulance stations where ambulances and crews wait for the request.
Dispatch Center	B00_18	Dispatch Center (Number)	text				The number of dispatch centers which is operated by EMS agencies, police departments, or fire departments. Public Safety Answering Points are also included (example 1339 emergency medical information centers in Korea)
	B00_19	Certified Dispatcher (Number)	text				The total number of certified dispatcher in the study area
	B00_20	Non-Certified Dispatcher (Number)	text				The total number of non-certified dispatcher in the study area

Table 3. Process

Part	Number	Data Element	Code type	choice	Variable Code	Variable	Definition
Total OHCA	C00_01	Survey Year	text				The year, in which following variables were investigated
	C00_02	Call to Departure (minute), mean	text				Call to Departure: the difference between the date/time the phone rings (dispatch center or public safety answering point or other designated entity) requesting EMS services and the date/time the EMS unit responded; that is, the time vehicle started moving. If the precise time of departure is not known, the date/time the responding unit was notified by dispatch could substitute the departure time.
	C00_03	Call to Departure (minute), standard deviation	text				
	C00_04	Call to Departure (minute), median	text				
	C00_05	Call to Departure (minute), 25 percentile	text				
	C00_06	Call to Departure (minute), 75 percentile	text				
	C00_07	Departure to Scene (minute), mean	text				Departure to Scene : the difference between the date/time the

		C00_08	Departure to Scene (minute), standard deviation	text				EMS unit responded (started moving) and the date/time the responding unit arrived at the patient's side. if the precise time of arrival 'at patient is not known, the date/time the responding unit arrived on the scene; that is, the time the vehicle stopped moving can substitute the scene time.
		C00_09	Departure to Scene (minute), median	text				
		C00_10	Departure to Scene (minute), 25 percentile	text				
		C00_11	Departure to Scene (minute), 75 percentile	text				
		C00_12	Scene to Departure (minute), mean	text				Scene to Departure : the difference between the date/time the responding unit arrived at the patient's side and the date/time the responding unit left the scene (started moving). if the precise time of arrival 'at patient is not known, the date/time the responding unit arrived on the scene; that is, the time the vehicle stopped moving can substitute the scene time.
		C00_13	Scene to Departure (minute), standard deviation	text				
		C00_14	Scene to Departure (minute), median	text				
		C00_15	Scene to Departure (minute), 25 percentile	text				
		C00_16	Scene to Departure (minute), 75 percentile	text				
		C00_17	Departure to Hospital (minute), mean	text				Departure to Hospital : the difference between the date/time the responding unit left the scene (start moving) and the date/time the responding unit arrived with the patient at the destination (hospital etc) or transfer point
		C00_18	Departure to Hospital (minute), standard deviation	text				
		C00_19	Departure to Hospital (minute), median	text				
		C00_20	Departure to Hospital (minute), 25 percentile	text				
		C00_21	Departure to Hospital (minute), 75 percentile	text				
		C01_01	Survey Year	text				The year, in which following variables were investigated
		C01_02	Call to Departure (minute), mean	text				Call to Departure: the difference between the date/time the phone rings (dispatch center or public safety answering point or other designated entity) requesting EMS services and the date/time the EMS unit responded; that is, the time vehicle started moving. If the precise time of departure is not known, the date/time the responding unit was notified by dispatch could substitute the departure time.
		C01_03	Call to Departure (minute), standard deviation	text				
		C01_04	Call to Departure (minute), median	text				
		C01_05	Call to Departure (minute), 25 percentile	text				
		C01_06	Call to Departure (minute), 75 percentile	text				
		C01_07	Departure to Scene (minute), mean	text				Departure to Scene: the difference between the date/time the EMS unit responded (started moving) and the date/time the responding unit arrived at the patient's side. If the precise time of departure is not known, the date/time the responding unit was notified by dispatch could substitute the departure time.
		C01_08	Departure to Scene (minute), standard deviation	text				
		C01_09	Departure to Scene (minute), median	text				
		C01_10	Departure to Scene (minute), 25 percentile	text				
		C01_11	Departure to Scene (minute), 75 percentile	text				
		C01_12	Scene to Departure (minute), mean	text				Scene to Departure: the difference between the date/time the responding unit arrived at the patient's side and the date/time the responding unit left the scene (started moving). if the precise time of arrival at patient is not known, the date/time the responding unit arrived on the scene; that is, the time the vehicle stopped moving can substitute the scene time.
		C01_13	Scene to Departure (minute), standard deviation	text				
		C01_14	Scene to Departure (minute), median	text				
		C01_15	Scene to Departure (minute), 25 percentile	text				
		C01_16	Scene to Departure (minute), 75 percentile	text				
		C01_17	Departure to Hospital (minute), mean	text				Departure to Hospital : the difference between the date/time the responding unit left the scene (start moving) and the date/time the responding unit arrived with the patient at the destination
		C01_18	Departure to Hospital (minute), standard deviation	text				
		C01_19	Departure to Hospital (minute), median	text				

	C01_20	Departure to Hospital (minute), 25 percentile	text				(hospital etc) or transfer point
	C01_21	Departure to Hospital (minute), 75 percentile	text				

Table 4. Outcomes

Part	Number	Data Element	Code type	variable code	variable	Definition
Total	D00_01	Outcome Survey Year	text			The year, in which following variables were investigated
	D00_02	Transport, total per year (Number)	text			The number of transported patients per year.
	D00_03	Transport, total injury per year (Number)	text			The number of transported injured patients per year.
	D00_04	Transport, total non-injury per year (Number)	text			The number of transported non-injured patients per year.
	D00_05	Transport, total children less than 15 years per year (Number)	text			The number of transported patients younger than 15 years per year.
	D00_06	Transport, total more than 65 years per year (Number)	text			The number of transported patients older than 65 years per year.
OHCA	D01_01	EMS-assessed OHCA per year (Number)	text			The number of out of hospital cardiac arrest assessed by EMS per year
	D01_02	EMS-treated OHCA per year (Number)	text			The number of out of hospital cardiac arrest treated by EMS per year. EMS-treated means the patient received any kind of resuscitative efforts by EMS, including BVM and cardiac compression.
	D01_03	Bystander CPR (Number)	text			The number of out of hospital cardiac arrest who received bystander CPR, per year
	D01_04	EMS Defibrillation (Number)	text			The number of out of hospital cardiac arrest who received Defibrillation by EMS, per year
	D01_05	EMS CPR (Number)	text			The number of out of hospital cardiac arrest who received CPR by EMS, per year. CPR by EMS means that cardiac compression was performed.
	D01_06	Survival to Hospital Admission (Number)	text			The number of out of hospital cardiac arrest who survived to admit to the hospital ,per year
	D01_07	Survival to Hospital Discharge (Number)	text			The number of out of hospital cardiac arrest who survived to discharge from the hospital ,per year
	D01_08	Good CPC (1 and 2) (Number)	text			The number of out of hospital cardiac arrest who survived to have good CPC, which is 1 or 2,per year
	D01_09	Time of CPC evaluation	single	1	at admission	choose the nearest point of the first CPC evaluation
				2	at discharge	
				3	one month follow up	

					4	three month follow up	
					5	six month follow up	
					6	one year follow up	

Table 5. Medical direction

Part	Number	Data Element	Code type	choice	Variable Code	Variable	Definition
medical direction	E00_01	Medical Direction Type	combo	single	1	Mixed	The type of medical direction
					2	Direct (On-line)	
					3	Indirect (Off-line)	
	E00_02	On-line Medical Direction Site	combo	single	1	Mixed	the place from where medical directions were given on-line
					2	Dispatch Center	
					3	Independent Public Center	
					4	Base Hopital	
					5	Other	
	E00_03	Medical Director Certification	combo	single	1	Certified	The certification of medical directors
					2	Non-certified	
	E00_04	Medical Director Employment	combo	single	1	Volunteer	How is the medical directors are employed by the EMS
					2	Part-time	
					3	Full-time	
	E00_05	Committee for Medical Oversight	combo	single	1	Yes	Does the committee exist formally?
					2	No	
	E00_06	Procedures, permitted	combo	multiple	1	CNS Catheter-Epidural Maintenance	A list of all procedures that the agency has implemented and available for use.
					2	CNS Catheter-Intraventricular Maintenance	
					3	Airway-Needle Cricothyroitomy	
					4	Airway-Surgical Cricothyroitomy	
					5	Airway-Direct Laryngoscopy	
					6	Airway-Video Laryngoscopy	

					7	Chest Decompression	
					8	Chest Tube Placement	
					9	Pericardiocentesis	
					10	Intra-Aortic Balloon Pump Maintenance	
					11	Left Ventricular Assist Device Maintenance	
					12	Arterial Access-Blood Draw	
					13	Venous Access-Blood Draw	
					14	Venous Access-Existing Catheter	
					15	Venous Access-Extremity	
					16	Venous Access-External Jugular Line	
					17	Venous Access-Femoral Line	
					18	Blood Glucose Analysis	
					19	Venous Access-Internal Jugular Line	
					20	Venous Access-Subclavian Line	
					21	Venous Access-Discontinue	
					22	Venous Access-Umbilical Vein Cannulation	
					23	Venous Access-Intraosseous Adult	
					24	Venous Access-Intraosseous Pediatric	
					25	Urinary Catheterization	
					26	Childbirth	
					27	Joint Reduction/Relocation	
					28	Escharotomy	
					29	Decontamination	
					30	Capnography (CO2 Measurement)	
					31	Pulse Oximetry	
					32	Cardiac Monitor	
					33	Orthostatic Blood Pressure Measurement	
					34	Patient Monitoring of Pre-existing Devices, Equipment, or Ongoing Medications	
					35	Arterial Line Maintenance	
					36	Venous Access-Central Line Maintenance	
					37	Venous Access-Swan Ganz Maintenance	
					38	Assessment-Adult	
					39	Assessment-Pediatric	

					40	Pain Measurement	
					41	Temperature Measurement	
					42	Thrombolytic Screen	
					43	12 Lead ECG-Obtain	
					44	12 Lead ECG-Transmitted	
					45	Wound Care-Taser Barb Removal	
					46	Wound Care-Tourniquet	
					47	Wound Care-General	
					48	Wound Care-Irrigation	
					49	Wound Care-Hemostatic Agent	
					50	Patient Warming (Hot Pack, etc.)	
					51	Splinting-Traction	
					52	Splinting-Basic	
					53	MAST	
					54	Spinal Immobilization	
					55	Airway-CPAP	
					56	Airway-Respirator Operation (BLS)	
					57	Airway-Bagged (via tube)	
					58	Airway-Bagged (via BVMask)	
					59	Airway-Nebulizer Treatment	
					60	Airway-Nasal	
					61	Airway-Oral	
					62	Airway-EOA/EGTA	
					63	Airway-Orotracheal Intubation	
					64	Airway-Nasotracheal Intubation	
					65	Airway-Rapid Sequence Intubation	
					66	Airway-Combitube Blind Insertion Airway Device	
					67	Airway-Laryngeal Mask Blind Insertion Airway Device	
					68	Airway-King LT Blind Insertion Airway Device	
					69	Gastric Tube Insertion-Inserted Nasally	
					70	Gastric Tube Insertion-Inserted Orally	
					71	Airway-Ventilator Operation	
					72	Airway-Ventilator with PEEP	

					73	Airway-BiPAP	
					74	Airway-Impedance Threshold Device	
					75	Airway-PEEP	
					76	Airway-Intubation Confirm Colorimetric ETCO2	
					77	Airway-Intubation Confirm Esophageal Bulb	
					78	Airway-Extubation	
					79	Airway-Change Tracheostomy Tube	
					80	Airway-Intubation of Existing Tracheostomy Stoma	
					81	Airway-Cleared, Opened, or Heimlich	
					82	Airway-Foreign Body Removal	
					83	Airway-Suctioning	
					84	Vagal Maneuver-Carotid Massage	
					85	Vagal Maneuver-Valsalva or Other Vagal Maneuver (Not Carotid Massage)	
					86	Restraints-Pharmacological	
					87	Restraints-Physical	
					88	Patient Cooling (Cold Pack, etc.)	
					89	Patient Cooling-Post Resuscitation	
					90	Injections-SQ/IM	
					91	Cardiac Pacing-External	
					92	Cardiac Pacing-Transvenous	
					93	Cardioversion	
					94	CPR by Other External Automated Device	
					95	CPR-AutoPulse Device	
					96	CPR-Mechanical Thumper Type Device	
					97	CPR-Precordial Thump Only	
					98	CPR-Start Compressions and Ventilations	
					99	CPR-Start Compressions only without Ventilation	
					100	CPR-Start Rescue Breathing without Compressions	
					101	CPR-Stop	
					102	Defibrillation-Automated (AED)	
					103	Defibrillation-Manual	
					104	Defibrillation-Placement for Monitoring/Analysis	

					105	Rescue	
					106	Extrication	
					107	Patient Loaded-Helicopter Hot-Load	
					108	Patient Off-Loaded	
					109	Patient Off-Loaded Helicopter Hot Off-Load	
					110	Specialty Center Activation-Adult Trauma	
					111	Specialty Center Activation-Pediatric Trauma	
					112	Specialty Center Activation-Cardiac Arrest	
					113	Specialty Center Activation-STEMI	
					114	Specialty Center Activation-Stroke	
					115	Activation-Advanced Hazmat Specialty Service/Response Team	
					116	Activation-Fire Rehabilitation Specialty Service/Response Team	
					117	Activation-Other Specialty Service/Response Team	
					118	Activation-Rescue Specialty Service/Response Team	
					119	Activation-Social Services Notification/Referral	
					120	Activation-Tactical or SWAT Specialty Service/Response Team	
					121	Patient Loaded	
					122	Contact Medical Control	
	E00_07	Protocol	combo	multiple	1	Abdominal Pain	A list of all of the medical treatment protocols that the agency has in place and available for use.
					2	Airway	
					3	Airway-Failed	
					4	Airway-RSI	
					5	Allergic Reaction/Anaphylaxis	
					6	Altered Mental Status	
					7	Altitude Sickness	
					8	Asystole	
					9	Atrial Fibrillation	
					10	Back Pain	
					11	Behavioral	

					12	Bites and Envenomations	
					13	Bradycardia	
					14	Burns	
					15	Cardiac Arrest	
					16	Cardiac Chest Pain	
					17	Childbirth/Labor	
					18	Cold Exposure	
					19	Dental Problems	
					20	Device Malfunction	
					21	Diarrhea	
					22	Drowning/Near Drowning	
					23	Diving Emergencies	
					24	Electrical Injuries	
					25	Epistaxis	
					26	Exposure-Airway Irritants	
					27	Exposure-Biological/Infectious	
					28	Exposure-Blistering Agents	
					29	Exposure-Cyanide	
					30	Exposure-Nerve Agents	
					31	Exposure-Radiologic Agents	
					32	Exposure-Riot Control Agents	
					33	Extremity Trauma	
					34	Eye Trauma	
					35	Fever	
					36	Gynecologic Emergencies	
					37	Head Trauma	
					38	Hyperglycemia	
					39	Hypertension	
					40	Hyperthermia	
					41	Hypoglycemia	
					42	Hypotension/Shock (Non-Trauma)	
					43	Hypothermia	
					44	IV Access	
					45	Trauma-Multisystem	

				46	Newly Born	
				47	Obstetrical Emergencies	
				48	Overdose/Toxic Ingestion	
				49	Pain Control	
				50	Post Resuscitation	
				51	Pulmonary Edema	
				52	Pulseless Electrical Activity	
				53	Respiratory Distress	
				54	Seizure	
				55	Spinal Cord Trauma	
				56	Spinal Immobilization	
				57	Supraventricular Tachycardia	
				58	Stroke/TIA	
				59	Syncope	
				60	Trauma-Arrest	
				61	Trauma-Amputation	
				62	Universal Patient Care	
				63	Ventricular Fibrillation	
				64	Ventricular Ectopy	
				65	Ventricular Tachycardia	
				66	Vomiting	
	E00_08	Dispatch Protocol	combo	single	1	MPDS	The type of protocols used by the Dispatch system. MPDS (Medical Priority Dispatch System), CBD (Criteria Based Dispatch). Or The one developed by yourself or others.
				2	CBD	
				3	Developed by yours	
				4	non-protocol	