

Georgetown Infectious Disease Atlas (GIDA) Technical Appendix

GEORGETOWN INFECTIOUS DISEASE ATLAS (GIDA) TECHNICAL APPENDIX	1
OVERVIEW	2
DATA DEFINITIONS	2
DATA SOURCE	3
PROJECT BASICS	3
FUNDER INFORMATION	4
RECIPIENT INFORMATION	5
TRANSACTION INFORMATION	5
JOINT EXTERNAL EVALUATION DETAILS	5
DATA PROCESSING AND AGGREGATION	6
MINIMUM DATA REQUIREMENTS FOR INCORPORATION OF DATA INTO GIDA	6
TAGGING GHSA FUNDING AND SUPPORT	6
TAGGING CORE CAPACITIES	6
DEDUPLICATION	6
FUNDING AND SUPPORT DATA INCORPORATED INTO GIDA	7
INTERNATIONAL AID TRANSPARENCY INITIATIVE (IATI) DATA	8
US WHITE HOUSE GHSA PROGRESS AND IMPACT REPORT	11
ARTICLE X COMPENDIUMS	11
EBOLA RECOVERY TRACKING INITIATIVE	12
NUCLEAR THREAT INITIATIVE (NTI) COMMITMENT TRACKER	12
WHO CONTINGENCY FUND FOR EMERGENCIES	12
1540 ASSISTANCE DATABASE	12
GLOBAL CHINESE FINANCE DATASET	12
GLOBAL HEALTH CENTRE WORKING PAPER NO. 18	13
WORLD BANK EBOLA FINANCING RESEARCH BRIEF	13
BWC WORKING PAPERS	13
PHILANTHROPIC DATABASES AND PRESS RELEASES	13
PRIVATE SECTOR WEBSITES AND PRESS RELEASES	13
ADDITIONAL MEDIA STATEMENTS	13
ADDITIONAL PEER REVIEWED PUBLICATIONS	14
RESOLVE READYScore DATA	14
JEE MISSION REPORT AND EXECUTIVE SUMMARY DATA	14
DATA FROM DONOR COUNTRIES	15

Overview

The Georgetown Infectious Disease Atlas (GIDA) provides a shared resource to map the flow of committed and disbursed funds and support for global health security. GIDA allows both funders and recipients to identify gaps and prioritize future investments, and helps to highlight the ways in which funds can be allocated most effectively to have the greatest impact. The dashboard aggregates data from multiple data sources tracking funding and support for global health security, and provides information on which efforts are being funded, by whom, in which locations. Data may be submitted to GIDA directly by users, or may be incorporated into the tool based on data identified and reviewed by the research team. Details on the data requirements for new datasets to be incorporated into GIDA, as well as additional information on the data currently incorporated into GIDA, are provided below.

Data definitions

Table 1, below, provides descriptions and possible values for each data element tracking funding and/or support in the GIDA database. Additional detail on each data element is provided below.

Data element	Description	Possible values
Data source	The source of the data reported in GIDA (e.g. IATI)	Any relevant data source name
Project name	The name of the project, or a brief title describing the project's purpose	Any project name or NULL
Project description	A brief description of the project	Any project description or NULL
Support type	Whether the support given was direct financial or in-kind support	<u>Direct financial support</u> : transfer of funds directly from funder to recipient <u>In-kind support</u> : other forms of support and assistance that do not involve the direct transfer of funds from funder to recipient (e.g. deployment of personnel, transfer of goods and/or services)
GHSA funding or support	Whether or not the specified funds or support were provided under the Global Health Security Agenda (GHSA)	TRUE or FALSE
Core capacities	The core capacity of the Joint External Evaluation (JEE) that the project supports, if any	Any set of core capacities corresponding to the first edition Joint External Evaluation (2005), "General IHR implementation", or NULL
Funder name	The name of the funder, or group of funders (e.g. G-7)	Any funder name or NULL
Funder type	The type of funder, specified as government, international organization, NGO, academia, private sector, foundation, or other	Any relevant funder type

Funder country	The country of the funder	Any country name or NULL
Recipient name	The name of the recipient (or group of recipients) of the funds or support	Any recipient name, “General global benefit”, or NULL
Recipient type	The type of recipient, specified as government, international organization, NGO, academia, private sector, foundation, or other	Any relevant recipient type
Recipient country	The country of the recipient	Any country name or NULL
Transaction type	Whether support corresponds to a commitment or a disbursement	<u><i>Commitment</i></u> : A commitment is an official obligation from a funder to provide a specified amount of funds or support for the benefit of the recipient <u><i>Disbursement</i></u> : Disbursed funds or support have been distributed to the recipient and/or placed at the disposal of the recipient
Transaction year range	The years during which the support was disbursed or is intended to be disbursed	Any year or range of years or NULL
Transaction amount	The amount of funds committed or disbursed, for financial support data	Any amount of funds or NULL
Transaction currency	The currency corresponding to the reported amount of funds committed or disbursed, for financial support data	Any currency specified based on an ISO 4217 Currency Code
JEE score	Indicator-level scores for countries that have completed the Joint External Evaluation (JEE) process	Any pair of a JEE indicator and an integer score ranging from 1 to 5
Resolve ReadyScore	If available, Resolve ReadyScores for countries that have completed the JEE process	Resolve ReadyScores (0-100) by: <ul style="list-style-type: none"> • overall • prevent • detect • respond • other hazards

Table 1: Core data elements, descriptions, and possible values

Data source

Data Source: The source of the data reported in GIDA (e.g. IATI, Article X database). Data may be incorporated based on review of data sources identified by the research team, or based on data submitted directly to GIDA.

Project basics

Project name: The name of the project, or a brief title describing the project’s purpose.

Project description: A brief description of the project. Project descriptions are only included if they are directly provided by the data source being incorporated, otherwise, this value is captured as a NULL value.

Support type: Whether the support given was direct financial or in-kind support:

- Direct financial Support: transfer of funds directly from funder to recipient. Financial support includes debt forgiveness.
- In-kind support: other forms of support or assistance that do not involve the direct transfer of funds from funder to recipient (e.g. deployment of personnel, transfer of goods and/or services, commitment to advance an action package).

GHSA funding or support: Whether or not the specified funds or support were provided under the Global Health Security Agenda (GHSA). Only funds or support specifically identified as GHSA funding or support by the reporting entity are tagged as GHSA funding or support.

Core capacities: The core capacity of the Joint External Evaluation (JEE)¹ that the project supports, if any. Additional details on how projects are tagged by core capacity are available in the “Tagging core capacities” section of this technical appendix.

Funder information

Funder name: The name of the funder, or group of funders (e.g. G-7). One or more funders may be listed, though funders should be identified as a group only when the specific amount committed/dispensed by each individual funder is not known.

Funder type: The type of funder, specified as government, international organization, NGO, academia, private sector, foundation, or other.

- Government: Any governmental organization or government (including local, regional, and national government), or a group/coalition of States or regions
- International Organization: An entity established by a formal political agreement between members that have the status of international treaties (definition from OECD)
- NGO: Any non-profit entity without significant government participation or representation (definition from OECD)
- Academia: Any academic institution or academically-affiliated research group
- Private sector: Private corporations and households (definition from OECD)
- Foundation: A nonprofit corporation or a charitable trust with the principal purpose of making grants to unrelated organizations, institutions, or individuals (definition from Foundation Center)
- Other: Any other type of funder or recipient not well-categorized based on the funder types defined above

Funder types are specified based on how each funder describes themselves in public documentation.

¹ GIDA currently uses the core capacities identified in the first edition of the Joint External Evaluation

Funder country: The country of the funder. In the case of non-country funders (e.g. World Bank), funder country is specified as a NULL value.

Recipient information

Recipient name: The name of the recipient (or group of recipients) of the funds or support. One or more recipients may be identified, though recipients should be identified as a group only when the specific amount committed/disbursed to each individual recipient is not known. In cases where funding supports a global cause (e.g. a large international conference), the recipient is identified as “general global benefit.”

Recipient type: The type of recipient. See category definitions provided under “funder type.”

Recipient country: The country of the recipient. In the case of non-country recipients (e.g. World Bank), recipient country is specified as a NULL value.

Transaction information

Transaction type: Whether support corresponds to a commitment or a disbursement.

- **Commitment:** A commitment is an official obligation from a funder to provide a specified amount of funds or support for the benefit of the recipient.
- **Disbursement:** Disbursed funds or support have been distributed to the recipient and/or placed at the disposal of the recipient.

Transaction year range: The years during which the support was disbursed or is intended to be disbursed. Dates captured at the level of resolution at which they are reported (e.g. specific dates vs. years), though data are typically tracked by year within the sources integrated within GIDA.

Transaction amount: The amount of funds committed or disbursed, or the estimated value of the in-kind support (if any estimated amount is available). Estimated value of in-kind support is an optional value and will not be displayed as part of financial support information.

Transaction currency: The currency corresponding to the reported amount of funds committed or disbursed, specified as a three digit ISO 4217 Currency Code.

Joint External Evaluation details

JEE scores: For country funders and recipients, indicator-level scores ranging from 1 (no capacity) to 5 (sustainable capacity) for a country’s Joint External Evaluation (JEE). If a country has not completed a JEE and published a public mission report or executive summary, no JEE scores are tracked by GIDA. If a country has multiple JEEs, multiple sets of scores will be tracked. Additional information on the JEE is available online at <http://www.who.int/ihr/publications/WHO-WHE-CPI-2017.53/en/>.

Date and version of JEE: The date that a country’s JEE was completed, and the version of the JEE (“version 1” vs. “version 2”).

Data processing and aggregation

GIDA currently incorporates aggregates data from a number of data sets described in additional detail below. Data from each of these sources were reviewed and processed in order to tag each project, where applicable, by core capacity, to ensure that data were in the necessary format, and to de-duplicate data between data sources.

Minimum data requirements for incorporation of data into GIDA

As a minimum, each data source incorporated into GIDA must include:

- Funder OR recipient information
 - Funder name (this can be a specific funder or a group of funders)
 - Recipient name (this can be a specific recipient or a group of recipients)
- Whether the project described provided *in-kind support* or *financial support*
- Whether the project described corresponds to a *commitment* or *disbursement*
- Unique identifying information for deduplication purposes with other data sources (e.g. project name, description, or other identifying information)

Tagging GHSA funding and support

Funds and support are only tagged as “GHSA funding and support” if the entity reporting the data specifically reported that the funds or support were allocated under the Global Health Security Agenda (GHSA).

Tagging core capacities

When funding or support was provided to directly support one or more core capacities identified by the Joint External Evaluation (JEE), data were tagged by those core capacities, using the core capacities identified in the first edition of the JEE. Due to their high volume, data from IATI were tagged with core capacities based on targeted string searches (these search terms, and additional information, are provided in the “IATI” section below). For all other datasets, efforts were tagged by core capacities based on review of the project name and description and select projects were tagged as belonging to all five response core capacities.

Deduplication

GIDA incorporates funding and support data from data sources tracking different types of information, with different focus areas, so overlap between these data sources is limited. However, in some instances, duplicate information is stored within a single data source (e.g. duplicate data within IATI) or is replicated in two different data sources (e.g. data within both IATI and Article X data sources).

Data are deduplicated to the extent possible based on review by the research team, and any data flagged as potential duplicates from the reporting data source are excluded from the GIDA database. For large funding commitments, data are manually reviewed by the research team to identify any known duplicates. A record of all data excluded due to duplication is kept for reference by the research team.

Funding and support data incorporated into GIDA

Table 2, below, identifies all data sources tracking funding and support that are currently incorporated into GIDA. Additional detail on each data source is provided below.

Data Source	Month updated	Inclusion/Exclusion criteria
International Aid Transparency Initiative (IATI)	March 2019	Funding associated with 20 sectors (identified based on DAC-5 codes) relevant to IHR-related activities, or funding from the World Health Organization, for activities starting on or after January 1, 2014. Activities must have at least one non-zero transaction between 1 January, 2014 and 21 March, 2019. Data flagged by IATI as duplicates were excluded.
Article X Compendiums	April 2019	All non-duplicative funding and support identified in the Article X Compendiums were incorporated into GIDA. Data are pulled from this paper every year it is submitted.
Nuclear Threat Initiative (NTI) Commitment Tracker	May 2018	All funding and support identified in the NTI Commitment Tracker were incorporated into GIDA, with the exception of commitments of countries to undergo the JEE evaluation process (within their own country).
WHO Contingency Fund for Emergencies	March 2018	All funding and support announced in Geneva in March 2018 were incorporated into GIDA.
1540 Assistance Database	July 2018	As the 1540 database does not specify years of funding nor currency of funding, no funding amounts from the 1540 database are currently incorporated into GIDA, though project details are tracked, including funder and recipient.
Ebola Recovery Tracking Initiative	April 2019	All funding and support identified in the Ebola Recovery Tracking Initiative were incorporated into GIDA.
US White House GHSA Progress and Impact Report	March 2018	All funding and support identified in the 2018 US White House GHSA Progress and Impact Report were incorporated into GIDA, with the exception of funding or support that was duplicative of information already identified within the Article X Compendium.
Global Chinese Finance Dataset	April 2019	All funding and support identified in the Global Chinese Finance Dataset were incorporated into GIDA.
Global Health Centre Working Paper No. 18	April 2019	All funding and support identified in the Global Health Centre working paper for which specific funders and/or recipients were reported were incorporated into GIDA.
World Bank Ebola Financing Research Brief	April 2019	All funding and support identified in the World Bank Ebola Financing Research Brief were incorporated into GIDA. Efforts to set up and define mechanisms for financing (not direct or current funding) were identified as forms of in-kind support.
BWC Working Papers	April 2019	All funding and support identified in the BWC Working Papers were incorporated into GIDA, excluding duplicate efforts already incorporated.

Philanthropic Databases and Press Releases	Multiple updates	All funding and support identified in these sources were incorporated into GIDA. The full list of websites and press releases is identified below.
Private Sector Websites and Press Releases	Multiple updates	All funding and support identified in these sources were incorporated into GIDA. The full list of websites and press releases is identified below.
Additional Media Statements	Multiple updates	All funding and support identified in these sources were incorporated into GIDA. The full list of media statements is identified below.
Additional Peer Reviewed Publications	Multiple updates	All funding and support identified in these peer reviewed publications were incorporated into GIDA.
Resolve ReadyScore data	April 2019	All available ReadyScore data were incorporated into GIDA.
JEE Mission Report and Executive Summary Data	April 2019	All publicly available JEE mission report data were incorporated into GIDA.
Data from Donor Countries	Multiple updates	All funding and support data received from donor countries were incorporated into GIDA.

Table 2: Sources of data currently incorporated into GIDA.

International Aid Transparency Initiative (IATI) data

The International Aid Transparency Initiative (IATI) is a public, voluntary registry of international aid funding initiatives, and aggregates data shared by over 600 organizations. IATI data from selected sectors are included in GIDA.

The research team accessed project data via IATI that corresponded to activities started on or after January 1, 2014, with at least one transaction (commitment, disbursement, or expenditure) with a non-zero value, on or after January 1, 2014. Activity data flagged by IATI as duplicates were excluded. As IATI includes information on funding initiatives across many sectors, only funding data from the World Health Organization, or for a sector related to global health security, are included in GIDA. The table below identifies the specific sectors from IATI for which data are incorporated.

Sector Name	DAC-5 Code
Health policy and administrative management	12110
Medical education/training	12181
Medical research	12182
Medical services	12191
Basic health care	12230
Basic health infrastructure	12240
Basic nutrition	12240
Infectious disease control	12250
Health education	12261
Malaria control	12262
Tuberculosis control	12263
Health personnel development	12281

Population policy and administrative management	13010
Reproductive health care	13020
Family planning	13030
STD control including HIV/AIDS	13040
Personnel development for population and reproductive health	13081
Livestock/veterinary services	31195
Social mitigation of HIV/AIDS	16064
Pharmaceutical production	32168

Table 3: IATI sectors used as inclusion criteria for GIDA

IATI data were tagged by core capacity using string searches for terms defined by the research team and informed by the language used by the Joint External Evaluation framework². The zoonotic diseases identified to tag the core capacity *P.4 Zoonotic Disease* were informed by a review of OIE Listed Diseases.³

Core Capacity	String Search Terms (case insensitive)
P.1 National Legislation, Policy, and Financing	legislation; legislative; financing; fiscal; regulatory; regulation; legal framework; policy; policies
P.2 IHR Coordination, Communication and Advocacy	implementation of the international health regulations; IHR coordination; IHR advocacy; IHR focal point; NFP; IHR regional contact point
P.3 Antimicrobial Resistance (AMR)	antibiotic; antimicrobial; amr; artemisinin; dr-tb; drug resist; resistance to drugs; resistant bacteria; resistant malaria; resistant tb; healthcare associated infection; HCAI
P.4 Zoonotic Disease	zoono; animal disease; animal health; animal virus; anthrax; aujeszky; avian; bluetongue; bovine; bovine; brucella; brucellosis; camelpox; caprine; chagas; chlamydia abortus; chrysomya bezziana; coxsiellosis; contagious agalactia; coronavirus; crimean congo hemorrhagic fever; wildlife; duck virus hepatitis; echinococcus granulosus; echinococcus multilocularis; enzootic bovine leukosis; epizootic haemorrhagic disease; EAEVE; FMD; foot and mouth disease; foot-and-mouth disease; fowl typhoid; gumboro disease; haemorrhagic septicaemia; heartwater; infectious bursal disease; infectious pustular vulvovaginitis; influenza a; japanese encephalitis; leishmania; leishmaniasis; lumpy skin disease; marburg; MERS; middle east respiratory syndrome; mycoplasma gallisepticum; mycoplasma synoviae; new world screwworm; newcastle disease virus; nipah; OIE; PVS; old world screwworm; One Health; paratuberculosis, q fever; pullorum disease; rabies; rift valley fever; rinderpest; SARS; sheep and goat pox; sudden acute respiratory syndrome; SARS; surra; swine fever; theileriosis; transmissible gastroenteritis; trichinella spp; trichomonosis; trypanosoma evansi; trypanosomiasis; tularemia;

² The string searches used to tag data from IATI were updated in April 2019.

³ "OIE-Listed Diseases: World Organisation for Animal Health." Animal Health in the World, www.oie.int/en/animal-health-in-the-world/oie-listed-diseases-2018/.

	turkey rhinotracheitis; veterin; west nile fever; west nile virus; yellow fever; vector control; livestock
P.5 Food Safety	food safety; food security; food contamination; foodborne; food borne; food poisoning; International Food Safety Authority Network; INFOSAN; Salmonella; total diet study; harmonized total diet study; food recall
P.6 Biosafety and Biosecurity	bio-safety; bio-security; bio-risk; bio risk; biorisk; biological risk protocols; biological safety; biological security; biosaf; biosec; BSL; inventory of pathogen; pathogen inventory; pathogen control measures; access pathogen; laboratory licens; audit lab; laboratory audit; lab audit; ISO accred; specimen transport; sample transport; transport of specimen; transport of infectious; transport of sample; shipment of specimens; shipment of sample; infectious substance transport; shipping infectious; shipping sample; shipping specimen; biosafety cabinet; BSC; International Federation of Biosafety Associations; IFBA; waste management; biological waste; safety equip
P.7 Immunization	cold chain; cold stores; immun; vacc; measles eradication; GAVI; injection safety
D.1 National Laboratory System	diagnostic; RDT; lab; rapid detection; rapid test; BSL; microbiological test; bacteriology; virology; serology; parasitology; polymerase chain reaction; PCR; virus culture; microscopy; bacterial culture; case detection
D.2 Real Time Surveillance	data management system; electronic reporting; data exchange systems; detect; health information system; information management system; screen; surveil; EBS; IBS; early warning; monitoring system
D.3 Reporting	report; notifiable; EIS; event information system; global public health intelligence network; GPHIN; MedISys; WAHIS; IHR focal point; OIE delegate; OIE contact point; public health emergency of international concern; PHEIC; Early Warning and Response System
D.4 Workforce Development	capacity building; development of capacity; operational capacity; personnel; staff; train; vocational; workforce; continuing education; curriculum; Massive Open Online Course; MOOC; teach; workshop; seminar; training; conference; trainer; symposium; fellowship; field epidemiology training program; FETP
R.1 Preparedness	prepared; plan; surge capacity; risk map; resource map; resources map; risk assess; assess risk; risk profile; profile on risk
R.2 Emergency Response Operations	emergency; rapid respon; response operations; RRT; EOC; operational response; operation center; operation centre; coordinated response; IMS; incident manage; activation
R.3 Linking Public Health and Security Authorities	biological weapon; CBRN; security; criminal; crime; deliberate; interdict; intentional release; law enforcement; police; terrorism; terrorist; INTERPOL; forensic
R.4 Medical Countermeasures and Personnel Deployment	deploy; MCM; countermeasure; stockpile; SNS; supply management; warehousing and distributing drugs; sending health

	personnel; receiving health personnel; receipt of health personnel; request personnel; GOARN
R.5 Risk Communication	community engage; engage population; public awareness; public trust; mass awareness; awareness campaign; public communic; risk communic; emergency communication; public messag; exchange of info; engagement strateg; media; social mobilization; behavior change; newspaper; radio; tv; television; social media; misinformation; rumour management; rumor management; dynamic listening; information education communication; EIC; hotline; communications system; coordinate communication; messaging
O.1 Points of Entry	border cross; border point; border security; cross-border; cross border; entry/exit sites; port; airport; ground crossing; shipping; shipment; PoE; points of entry; point of entry; quarantine; customs; border control; ill travelers; inspection of conveyances; exit screening; entry screening; international travel; baggage; cargo; postal; smuggl; trafficking; import; export
O.2 Chemical Events	CBRN; chemical; chemistry; poison; INTOX; INCHEM; Poisindex; persistent organic pollutant; SAICM; UNECE; hazardous site; OPWC; CWC
O.3 Radiation Emergencies	CBRN; nuclear; radiological; radiation; radioactive; nuclear; IAEA; GICNT
General IHR Implementation	national action plan; NAPHS; IHR implementation; IHR cost

Table 4: Search terms for core capacity tagging within IATI data. Search terms specified as a semicolon separated list.

US White House GHSA Progress and Impact Report

In February of 2018, the United States published its second annual report on progress and impact from U.S. investment in the GHSA. Where specific funders, recipients, and funding transactions were referenced in this report, data were incorporated into the GHSA tracking dashboard. The 2018 US White House GHSA Progress and Impact Report is available online [here](#). Data were extracted from this written report by the research team, and all projects identified in this report were identified as GHSA funding or support. Projects were tagged by relevant core capacities based on project names and descriptions included in the written document.

Article X Compendiums

A compendium of projects related to Article X of the Biological and Toxin Weapons Convention was submitted by Canada, Denmark, the European Union, Finland, Germany, Italy, Japan, Netherlands, Spain, Sweden, the United Kingdom, and the United States of America. These member countries of the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction are mutually committed to implementing global projects to combat WMD-related terrorism and proliferation. The compendium includes detailed information on Article X-relevant projects implemented and/or funded by GP members since December 2016. Data were manually extracted from these written reports by the research team and were tagged by relevant core capacities based on project names and descriptions.

Ebola Recovery Tracking Initiative

The Ebola Recovery Tracking Initiative tracks official development assistance towards Ebola recovery efforts in Guinea, Liberia, Sierra Leone, and the Mano River Union. The initiative is a partnership between the governments of Guinea, Liberia and Sierra Leone, the United Nations Office of the Secretary-General's Special Adviser on Community Based Medicine and Lessons from Haiti, and the United Nations Development Programme (UNDP). The Ebola Recovery Tracking Initiative is available online at: <https://ebolarecovery.org/>. Data were manually extracted from this website by the research team, and were tagged by relevant core capacities based on project names and descriptions.

Nuclear Threat Initiative (NTI) Commitment Tracker

The Nuclear Threat Initiative (NTI) Commitment Tracker was developed to track global health security funding commitments and to foster accountability for existing commitments. The NTI Commitment Tracker tracks financial commitments as well as commitments to complete or support the JEE process, advance GHSA action packages, or to participate in other activities to build global health security. All projects identified in the NTI Commitment Tracker were identified as GHSA funding, and projects were tagged by relevant core capacities based on project names and descriptions.

WHO Contingency Fund for Emergencies

In March of 2018, Canada, Denmark, Estonia, Germany, the Republic of Korea, Kuwait, Luxembourg, Malta, Netherlands, Norway, and the United Kingdom of Great Britain and Northern Ireland announced their commitments to the World Health Organization (WHO) Contingency Fund for Emergencies. These funds are intended to support the rapid financing of response operations. Information about the WHO Contingency Fund for Emergencies is available online at: <http://origin.who.int/mediacentre/news/releases/2018/contingency-fund-emergencies/en/>. Additional contributions to the fund are found at: <http://origin.who.int/emergencies/funding/contingency-fund/en/>. All data from the WHO Contingency Fund for Emergencies were tagged as supporting all "response" core capabilities.

1540 Assistance Database

The 1540 Assistance Database was developed by the 1540 Committee pursuant to UNSC Resolution 1540 (2004), for the purpose of providing additional information on the national implementation of regulations and measures related to the resolution. As the 1540 database does not specify years of funding nor currency of funding, no funding amounts from the 1540 database are currently incorporated into GIDA. All projects marked as "completed" are assumed to correspond to disbursed efforts, and all projects marked as "active" are assumed to correspond to commitments. Moreover, all projects are tracked as in-kind support unless they are specifically identified as "funding" within the 1540 database's 'Description of activities.' All projects for which the CBRN Risk Addressed Code was specified as "Nuclear" were tagged by the core capacity "Radiation Emergencies," while those with the code "Chemical" were tagged as "Chemical Events." Information about the 1540 Assistance Database is available at: <https://www.un.org/en/sc/1540/national-implementation/legislative-database/general-information.shtml>.

Global Chinese Finance Dataset

AidData's Global Chinese Official Finance Dataset tracks known projects financed by China in Africa, the Middle East, Asia and the Pacific, Latin America and the Caribbean, and Central and Eastern Europe from 2000-2014. The data are publicly available online at: <https://www.aiddata.org/data/chinese-global-official-finance-dataset>.

Global Health Centre Working Paper No. 18

The Global Health Centre Working Paper No. 18, "Investing for a Rainy Day: Challenges in Financing National Preparedness for Outbreaks," authored by Suerie Moon and Rai Vaidya, identifies international investments related to national outbreak preparedness from a range of funders. The paper is publicly available online at: https://repository.graduateinstitute.ch/record/296613/files/wp_0018_v3.pdf. Data were manually extracted from this written report by the research team, and were tagged by relevant core capacities based on project names and descriptions.

World Bank Ebola Financing Research Brief

The World Bank Ebola Financing Research Brief provides information about World Bank contributions for the current and past Ebola outbreaks and overall pandemic preparedness. Data were shared with the research team by stakeholders from the World Bank. Data were manually extracted from this written report by the research team, and were tagged by relevant core capacities based on project names and descriptions. Where additional information was necessary to supplement information from the World Bank Ebola Financing Research Brief (e.g., information on the REDISSE project), additional information for those projects only was obtained via the World Bank project site available online at: <http://projects.worldbank.org/>.

BWC Working Papers

Occasionally, Members States of the BWC submit national papers describing capacity building efforts for health security. We capture data from those papers relevant to GIDA. Data from previously published papers were manually extracted by the research team, and were tagged by relevant core capacities based on project names and descriptions.

Philanthropic Databases and Press Releases

Data from the following philanthropic databases and press releases are incorporated into GIDA:

- Open Philanthropy Grant Database
- OXFAM International Media Release, 02 August 2018
- CARE International Media Release, 06 August 2018
- Médecins Sans Frontières (MSF) Media Release, 08 August 2018
- International Federation of Red Cross and Red Crescent Societies Media Release, 02 August 2018
- Cordaid Media Release, 09 August 2018

Private Sector Websites and Press Releases

Data from the following private sector websites and press releases are incorporated into GIDA:

- Merck Press Release, April 2018
- Johnson & Johnson Press Release, 2014
- UPS Press Release, 27 September 2018
- IFPMA Health Partnerships Directory, 2016

Additional Media Statements

Data from the following press releases and media statements are incorporated into GIDA:

- CDC Media Statement, 9 August 2018

- WFP Media Release, 07 June 2018
- USAID Media Release, 18 May 2018
- UNICEF Media Release, 10 August 2018
- International Organization for Migration Media Release, 10 August 2018
- WHO News Release, 24 July 2018
- UNICEF Media Release, 03 August 2018
- CDC Foundation Surveillance Press Release

For each database, website, press release or media statement, data were manually extracted by the research team, and were tagged by relevant core capacities based on project names and descriptions.

Additional Peer Reviewed Publications

In addition to the above data sources, we also receive and review peer reviewed publications describing both financial and in-kind support from countries and organizations. The data from previously received publications were extracted by the research team, and were tagged by relevant core capacities based on project names and descriptions.

Resolve ReadyScore Data

Resolve ReadyScores assess a country's ability to find, stop, and prevent health threats, and are determined based on the results of country-level Joint External Evaluations (JEEs). The score ranges from 0-100, and is calculated based on an average across JEE indicators and core capacities. A score of 80 or higher indicates that a country is "better prepared." ReadyScore data are publicly available online [here](#).

JEE Mission Report and Executive Summary Data

The Joint External Evaluation tool (JEE) measures country-specific progress in developing the capacities needed to prevent, detect, and respond to public health threats. Publicly available mission reports and executive summaries describing these evaluations are available online [here](#).

Within JEE mission reports, each of 48 indicators are assessed on a score ranging from 1 (no capacity) to 5 (sustained capacity), as shown below in Figure 1. Within GIDA, scores at the core capacity level are defined as the average of scores across indicators, for each core capacity. Overall capacity is defined as the average of all core capacity aggregate scores.

The United States of America scores

Capacities	Indicators	Score
National legislation, policy and financing	P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place are sufficient for implementation of IHR. (2005)	5
	P.1.2 The state can demonstrate that it has adjusted and aligned its domestic legislation, policies and administrative arrangements to enable compliance with the IHR (2005)	5
IHR coordination, communication and advocacy	P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR (2005)	5
Antimicrobial resistance	P.3.1 Antimicrobial resistance (AMR) detection	4
	P.3.2 Surveillance of infections caused by AMR pathogens	4
	P.3.3 Healthcare associated infection (HCAI) prevention and control programmes	4
	P.3.4 Antimicrobial stewardship activities	3
Zoonotic diseases	P.4.1 Surveillance systems are in place for priority zoonotic diseases/pathogens	3
	P.4.2 Veterinary or animal health workforce	4
	P.4.3 Mechanisms for responding to infectious zoonoses and potential zoonoses are established and functional	4

Figure 1: Selected JEE scores from United States of America JEE mission report

Data from Donor Countries

GIDA also incorporates data received directly from donor countries, submitted via the “Submit data” page included on the GIDA website.