DR2 Portal Criteria Guidance

The DR2 Portal Criteria Guidance provides brief descriptions of the keyword tags used to curate individual resources within the repository. These descriptions are not formal definitions, but indicators of how tags are defined and used specifically for the purposes of the Portal. All of the tags used to curate a Resource (whether filters or descriptors) are listed in the Resource Details page for each search result.

The goal of this Guidance is to provide transparency into the curation methodology, create maximum consistency, to the extent possible, across Resources to ensure reliable Search results, and assist persons wishing to submit a Resource for inclusion in identifying salient characteristics. We hope you find this information useful, and welcome any comments or feedback.

RESOURCE DESCRIPTION

Information used to identify and describe the basic features of a given Resource

Title: Title of the Resource. Do not begin the title with "A, An, or The."

Subtitle: Subtitle of the Resource. Do not include subtitles in the main title field.

URL: The main website/webpage where the Resource is located online. In some cases where the resource is hosted by NIEHS, this URL will be to a PDF. Related components of the Resource that are individual documents/tools are listed separately below.

Description: Other details that describe the study, major modules, study design, past use, IRB status, version history, or other unique information a user needs to know.

Resource Type: Main Resource type

- **Consent Form**: A component of the informed consent process that provides a written summary of the research project (including the study's purpose, research procedures, potential risks and benefits, etc.) and explains the individual's rights as a research participant.
- **Data Dictionary**: A list of each variable in a protocol and associated attributes such as variable names and unique identifiers
- **Guideline**: A checklist, flow diagram, or structured text developed using explicit methodology to guide authors in reporting a specific type of research
- **Instruction Manual**: A technical document that provides step by step instructions to complete a task

- **Research Protocol** [Includes study design]: A document that describes the background, rationale, objectives, design, methodology, statistical considerations, and organization of a clinical research project
- **Sample Collection Form**: A procedural guide to the collection of environmental samples or human specimens
- **Survey/Questionnaire**: A list of questions pertaining to an event or experience, administered to collect information from the study sample or participant
- **Toolkit**: A compendium of resources used together to expedite a process
- **Video**: A digital recording, reproduction, or broadcast of visual images
- **Other** (Write In)

Related Resources: Related components of the main Resource that are individual documents/tools, [e.g., a toolkit may contain multiple types of Resources]

- **Consent Form**: A component of the informed consent process that provides a written summary of the research project (including the study's purpose, research procedures, potential risks and benefits, etc.) and explains the individual's rights as a research participant. (Genome.gov)
- **Data Dictionary**: A list of each variable in a protocol and associated attributes such as variable names and unique identifiers
- **Dataset**: Collection of related sets of information that is composed of separate elements but can be manipulated as a unit; should be public/open access
- **Documentation**: Websites that aggregate multiple Related Resources [See e.g., https://hrs.isr.umich.edu/documentation] and/or additional information that does not fit within another of the Related Resource types
- **Guideline**: A checklist, flow diagram, or structured text developed using explicit methodology to guide authors in reporting a specific type of research
- **Instruction Manual**: A technical document that provides step by step instructions to complete a task
- **Research Protocol** [Includes study design]: A document that describes the background, rationale, objectives, design, methodology, statistical considerations, and organization of a clinical research project
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- **Other** (write in)

Source: The name of the Institution that created/sponsored the creation of the Resource

- **Name**
- **URL**

Funding Source: Source(s) of funding or in-kind support for the Resource

- **Academic Institution**
- **International Agency or Organization**
- **National Institutes of Health**
- **Other U.S. Federal Agency**
- **Other (foundation, nongovernmental institution)**

Contact: Individual, office, or group (typically Individual) associated with the Resource as the Contact for questions pertaining to its content or use.

- **Name**
- **Email or URL**: If both are available, only one will display.

Availability: Information pertaining to use and permissions.

- **Proprietary, Fee/Purchase Required**
- **Proprietary, No Cost/Training Required**
- **Publicly Available, No Cost**
- **Use with Permission, No Cost/Request Required**

Common Data Elements (CDEs): Standardized key terms or concepts that enable investigators to systematically collect, analyze, and share data across the research community; typically organized in topical sets

Content Adapted From [e.g., Other survey instruments, documents, applications, etc.]

Date Resource Published: Date the Resource was originally published online/made available

Date Record Updated: Date that is automatically generated from the DR2 Portal database when a Resource is added or changed

RESOURCE USE

Information relevant to the intended use and administration of the Resource

Administered By

Information on types of persons who are appropriate to administer the Resource *to* study participants (*not* the study participant, except in the case of Self-Administered).

- **Medical Professional**: [e.g., physician, physician's assistant, nurse, clinical technician]
- **Parent/Teacher**: [e.g., parent, teacher, school guidance counselor; does not matter if they require training]
- **Researcher/Professional Interviewer**: [e.g., scientist, researcher, survey designer, research assistant, or other individual who conducts research/science as a student or professional]
- **Self**: Study participant/respondent or their proxy who administers the Resource. Parents who act as proxy are tagged only as Parent/Teacher.
- **Trained Non-Expert**: Individual who is not a researcher by profession but who has been trained to administer the Resource.
- **Untrained Non-Expert**: Individual who is not a researcher/scientist/medical professional who can administer the Resource without prior training

Administration Mode (Survey/Questionnaire) [Multi-select]

- **In-Person Interview**
- **Online/Mobile App: [Includes computer-assisted Interview]**
- **Paper/Written**
- **Phone Interview [Includes computer-assisted Phone Interview]**
- **Other (write in)**

Administration Length/Time Complete (minutes)

- **1-15**
- **16-30**
- **31-60**
- **60+**

Ease of Use in Field/Disaster Setting: Assignment based on composite of multiple criteria such as level of training required, time to administer, etc. Tag options are assigned based on the

table below. For each tag (Easy, Moderate, Difficult), a resource must meet a requirement in at least two of the boxes in the column beneath each tag.

- **Easy**
- **Moderate**
- **Difficult**

Easy	Moderate	Difficult
<25 questions and/or <15 minutes to complete	25-60 questions and/or 15-25 minutes to complete	>61 questions and >30 minutes to complete
Self-administered, or Requires no special training or equipment	Self-administered, or Requires some special training, or Easily accessible equipment or facility	Requires above-average levels of training (often a graduate or professional degree)
Resource is free and publicly available	Requires owner's permission, or low to moderate cost	Requires purchase, or Not available to general public, or Requires proof of profession or affiliation

Electronic Data Capture (EDC) Filter is applied if the resource has electronic data capture capability.

- **EpiInfo** [https://www.cdc.gov/epiinfo/index.html]
- **GitHub** [https://github.com/]
- **Qualtrics** [https://Qualtrics.com]
- **RedCap** [https://www.project-redcap.org/]
- **Other** (write in; if more than one, separate using commas)

Flesch Kincaid Reading Level This is a score of ease of text readability, where 100 is highest readability.

- **100.00–90.00** (5th grade)
- **90.0–80.0** (6th grade)
- **80.0–70.0** (7th grade)
- **70.0–60.0** (8th to 9th grade)
- **60.0–50.0** (10th to 12th grade)
- **50.0–30.0** (College)
- **30.0–10.0** (College graduate)

- **10.0–0.0** (Professional)

Language Languages in which the tool is available.

- **Arabic**
- **Chinese**
- **English**
- **French**
- **Russian**
- **Spanish**
- **Other** (write in; if more than one, separate using commas)

Number of Survey Questions

- **1-25**
- **26-50**
- **51-74**
- **75-99**
- **100+**

Research Program Product [Multi-select]

- **Socio-Behavioral-Economic (SBE)**: Resources developed for use in NIH-funded SBE research projects [e.g., projects awarded under PAR-20-243, PAR-20-237 or similar new funding mechanisms]
- **Rapid Acceleration of Diagnostics-Underserved Populations (RADx-UP)**: Resources developed for use in NIH RADx-UP research projects [e.g., awarded under FOA NOT-OD-20-121 RFA-OD-20-013 OT-OD-20-119 NOT-OD-20-120, or other RADx-UP funding mechanisms]
- **N/A**
- **Other**

RESOURCE/RESEARCH FOCUS

Information related to the population of interest, research focus area, special interest, or outcomes, or other issues of applicability of the Resource

Study Population

Population for which a Resource was created or is appropriate for use with to collect data. This tag is NOT used to indicate the inclusion of a demographic question about a population contained in a Resource. If multiple populations are indicated or typically included in a study population, select all that apply. If no specific population is indicated, select General.

- **General**: Any population or no specific population indicated
- **Age**
    - **Any Age**: If other population types are indicated but age is not, select Any Age, along with any other options that apply. If no age or other specific population characteristics are indicated, select General only (leave Any Age blank).
    - **Adult**: Individual 18 years or older
        - Elderly/Older Adult: Individual 65 years or older
    - **Child**: Individual under the age of 18
        - Infant: Child less than 1 year old
        - Adolescent/Teen: Individual between the ages of 10 and 18
- **Occupation/Worker**
    - **Cleanup/Remediation Worker**: Individual who is professionally trained to clean up disaster sites, debris or remediate waste and works in this field [e.g., fire, water, mold remediation contractors]
    - **Essential Services Worker**: Workers in sectors that provide essential goods and services, interconnectedness and operability, public safety, and security during a public health emergency or disaster [e.g., hospital janitorial staff, grocery/food services and delivery staff, pharmacy staff, waste disposal workers, private security worker] *This category is used when the study is exploring the essential role of such workers in a public health emergency or disaster [e.g., a study of daycare workers typically would not be included* unless *the experience of daycare workers in the pandemic is a* focus *of the research. Does NOT include First Responder/EMS.]*
    - **First Responder/Emergency Medical Services (EMS)/Police/Fire Fighter:** Professionally trained responder, including trained "volunteer" responder who regularly performs such services in a community
    - **Healthcare Worker/Frontline Medical Personnel**: Individual who is professionally trained in healthcare/medical services delivery and support [e.g., physician, physician's assistant, nurse, laboratory/radiology technician,
    - **Military Personnel/Unit**: Military personnel or member of a military units. [e.g., National Guard, reserve, deployed, and locally stationed]

- o **Volunteer/Non-professional**: Individual or member of the public whose primary occupation is not disaster-related, but who voluntarily participate in organized response to a disaster or public health emergency. [e.g., participant in organized effort of community members or faith-based organizations such as food/clothing drives, participant with established volunteer organization such as Red Cross, AmeriCorps, food pantry, or others]
  - o **Other (write in)**
- **Sex/Gender**: Sex is a biological variable defined by characteristics encoded in and individual's DNA. Gender refers to social, cultural, and psychological traits linked to individuals through social context. Sex/Gender are selected only when specified as a focus of a Resource.
  - o **Male/Men**
  - o **Female/Woman**
    - ▪ **Pregnant/Lactating Woman**
  - o **Sexual/Gender Minority** [Includes LGBTQ individuals]
  - o **Other** (write in)
- **Special Population**
  - o **Ethnic/Religious/Tribal Member**: Individual who identifies with a specific subpopulation based on their membership in an ethnic group, religious faith, or Tribal Nation. Select only when such identification is purposely collected by, or a focus of, the Resource.
  - o **Evacuee/Refugee**
    - ▪ **Evacuee**: Individual who is forced to leave a geographic area (residential, city/village, state, national) due to risk or impact of a disaster (typically temporarily)
    - ▪ **Refugee**: Individual who has been forced to leave a geographic area (residential, city/village, state, national) due to risk or impact of a disaster for an extended/unknown period of duration or permanently
  - o **Homeless, Pre-Event**: Individual who did not have a permanent residence prior to the event, NOT one who became homeless due to the event
  - o **Other** (write in)

Event Type

Event type indicates the type of event a Resource would be OR could be appropriate for use in disaster research. Event Types (e.g., hurricane) that are listed in the Resource's title or description should always *be selected. If the Resource explores elements of a disaster/public health emergency that may also be applicable to research on other Event Types, select all*

appropriate. [e.g., If a survey focused on a hurricane event also asks about flooding impacts, select both Hurricane AND Flood].

- **Chemical Contamination/Release Event**: Spill, release, or contamination event of a chemical agent, regardless of intent or cause (natural, industrial, malicious), or whether part of a larger event or as a standalone event. [e.g., oil spill, release from industrial or Superfund site, transport-related accident]
- **Extreme Weather-Related Event**
  - **Drought**: A prolonged period of abnormally low rainfall, leading to a shortage of water
  - **Flood**: An overflow of water that submerges land that is usually dry [includes extreme rainfall and precipitation]
  - **Hurricane**: a storm with a violent wind [Includes typhoon or cyclone]
  - **Tornado/Wind Storm**: A mobile, destructive vortex of violently rotating winds having the appearance of a funnel-shaped cloud and advancing beneath a large storm system
  - **Wildfire** [Includes wildland fire and wildfire smoke. Does not include building/infrastructure fires not caused by a wildfire]
  - **Other** (write in)
- **Geologic Event**
  - **Earthquake**: A sudden and violent shaking of the ground as a result of movements within the earth's crust or volcanic action
  - **Landslide [**Includes mudslide]
  - **Volcanic Eruption** [Includes ash cloud, lava flow, etc.]
  - **Other** (write in)
- **Humanitarian Event** [Includes medical and public health issues that occur in process of serving displaced populations or responding to healthcare disruptions arising from war, civil war, famine, social unrest, population displacement (internal or external), mass migration of refugees, etc.]
- **Infectious Disease Outbreak**: Major outbreak or pandemic (or potential to become such) of infectious disease [e.g., influenza, SARS, MERS, and Ebola] that constitutes a disaster, or a public health emergency secondary to a disaster [e.g., malaria, dengue, cholera]. Resource must consider infectious disease within the context of a disaster/public health emergency scenario.
- **Large-Scale Accident** [Includes transportation accidents, structure collapses]
- **Large-Scale Violence/Terrorism** [Includes events of violence that result in disruption of healthcare services and/or mass casualties (e.g., bombings and mass shootings by domestic or foreign terrorists, or others), as well as incidents of terrorism employing

chemical or biological weapons (e.g., Anthrax), extreme noise or light/heat]. Use of chemical weapon should also be tagged as Chemical Contamination/Release Event.

- **Radiation Contamination/Release Event** [Includes intentional releases from dirty bombs, radiological dispersal devices (RDDs), and the nuclear power industry, as well as accidental radiation releases due to damage (e.g., during a hurricane)]
- **Other** (write in)
    - Write in specifics here?

Exposure Agent

Resource includes a major component (questions, sampling, or endpoints) relating to or otherwise focused on particular exposure agent. If specific options are not listed, the level above serves as the general tag.

- **Biological/Infectious Agent**
    - o **Allergen**
    - o **Bacteria**
    - o **Mold/Fungus**
    - o **Virus**: if not listed below, tag 'Virus'
        - ▪ **Dengue**
        - ▪ **Ebola**
        - ▪ **H1N1**
        - ▪ **Influenza**
        - ▪ **SARS-CoV-2, SARS-CoV-1, MERS** [Includes Coronavirus]
            - • **Multisystem Inflammatory Syndrome in Children (MIS-C)**
            - • **Long COVID/Post-Acute Sequelae of COVID (PASC)**
        - ▪ **West Nile Virus**
        - ▪ **Zika Virus**
- **Chemical Agent**
    - o **Air Pollutant**
        - ▪ **Carbon Monoxide**
        - ▪ **Ground Level Ozone**
        - ▪ **Particulate Matter**
        - ▪ **Polyaromatic Hydrocarbon**
    - o **Asbestos**
    - o **Hormone Disruptor/Hormonal Mimic**
    - o **Metal**
    - o **Mixture**
    - o **Nanomaterial**

- o **Pesticide/Herbicide/Fungicide**
- **Physical/Violence Agent**
  - o **Bomb/Improvised Explosive Device (IED)**
  - o **Debris**
  - o **Noise**
  - o **Other** (write in)
- **Radiological Agent**

Health Outcome/Organ System

Resource includes a major component (questions, sampling, or endpoints) relating to or otherwise focused on a particular organ system or health impact. If specific options are not listed, the level above serves as the general tag.

- **Cancer**
- **Circulatory/Cardiovascular** [Includes myocardial infarction (heart attack), stroke, blood pressure]
- **Dermatological/Integumentary/Exocrine**
- **Developmental**: Impacts on human development prenatal to maturity
  - o **Birth Outcomes** [e.g., still birth, birth defects, low birth weight, fetal loss, small for gestational age, and preterm birth]
  - o **Cognitive/Neurological/Psychological Disorder**: Disorders affecting development of general intellectual functioning such as reasoning, planning, judgment, abstract thinking, academic learning and experiential learning, specific developmental disorders of speech and language, motor function, pervasive developmental disorders
  - o **Pubertal Timing**: Changes in timing of onset of puberty
- **Diabetes/Obesity/Overweight** [Includes Type 1, Type 2 diabetes, changes in glucose intolerance and sensitivity, overweight, BMI]
- **Digestive/Excretory**
- **Endocrine**
- **Hepatic**
- **Injury**
- **Immune/Lymphatic**
- **Malnutrition/Food Insecurity**: Malnutrition arises from deficiencies of specific nutrients or from diets based on inappropriate combinations or proportions of foods [e.g., goiter, scurvy, anemia, and xerophthalmia which result from inadequate iodine, vitamin C, iron, and vitamin A, respectively, as well as general food

insecurity]. Malnutrition includes both *undernutrition* and *overnutrition*. Undernutrition is insufficient intake of energy and nutrients to meet an individual's needs to maintain good health. Overnutrition is excessive intake of energy and nutrients beyond an individual's needs to maintain good health and can result in obesity.

- **Mental Health and Well-Being**: An individual's emotional, psychological, and social well-being. [Includes mood disorders, suicide and suicidal ideation, schizophrenia, stress disorders, PTSD, dementia, anxiety, autism spectrum disorder, manic episodes, bipolar, OCD]
- **Morbidity/Mortality**: Morbidity is the condition of being diseased. Mortality is death, especially on a population scale. Select for Resources that explore rates of mortality or morbidity or the burden of disease from mortality and morbidity that is quantified using metrics [e.g., Disability-Adjusted Life Year, or DALY]
- **Neurological/Nervous System**: Diseases/disorders affecting the brain and central and autonomic nervous systems that result in symptoms including paralysis, muscle weakness, poor coordination, loss of sensation, seizures etc. [e.g., Alzheimer's Disease, epilepsy, multiple sclerosis, Parkinson's Disease, ALS, migraines]
- **Pregnancy**. Pregnancy status and impacts to pregnant women. Birth Outcomes are indicated under Developmental
- **Renal/Urinary**: Involving congenital or acquired dysfunction of the urinary and/or kidney/renal system [e.g. kidney disease, kidney failure, kidney stones]
- **Reproductive:** Effect on reproductive system or outcome such as infertility, sperm quality, pregnancy, puberty, or menopause.
- **Respiratory System and Respiratory**: [Includes respiratory samples or outcomes such as asthma, bronchitis/pneumonia, chronic obstructive pulmonary disease (COPD), interstitial lung disease (e.g., sarcoidosis, idiopathic pulmonary fibrosis), lung cancer, upper respiratory allergy (e.g., hay fever, seasonal allergies, pollinosis)]
- **Skeletal**
- **Other** (write in)

Special Topics
Resource includes a major component [e.g., multiple questions OR a module/section] or is otherwise focused on a particular topic.

- **Community Impacts:** Factors affecting the quality of life [e.g., resources, infrastructure, access to services and health care, etc.] and the individuals that make up the community
- **Comorbidities:** Coexistence of two or more disease processes

- **Demographics:** Assemblage of properties that distinguish populations and the people within societies [e.g., age, race, sex, ethnicity, marital status, income, education, employment]
- **Diagnosis/Status/Treatment/Recovery:** Identification of the nature of an illness or health problem by examination of the symptom; condition of patient at a given point in time; measures taken to respond to illness/injury; period following treatment and physiological response of patient to treatment including longer-term symptoms and outcomes of illness
- **Domestic Violence/Family Impacts:** Domestic violence is a pattern of abusive behavior [physical, verbal, emotional] by one partner in an intimate relationship toward another. Family impacts can include domestic violence or other effects on health or wellbeing of persons within a family/residing in the home resulting from changes in family structure, dynamics, or situation [e.g., stress arising from family member illness, forced relocation]
- **Government Support** [e.g., FEMA support, stipend/CARES Act funds, special unemployment funds related to disaster]
- **Illicit Drug Use/Substance Abuse:** Excessive use of an addictive substance that causes physiological or psychological dependence, in a way that is detrimental to self, society, or both. Illicit drugs include [e.g., marijuana/hashish, cocaine/crack, inhalants, hallucinogens, heroin, prescription-type drugs when misused (opioids, sedatives, tranquilizers, and stimulants)]
- **Lifestyle/Quality of Life:** Well-being of an individual or population at a specific point in time and factors (positive and negative) that affect it [e.g., relationships, personal health, education status, social status, environment, wealth, sense of safety and security, freedom, autonomy, decision making, social belonging, physical surroundings]
- **Perceptions:** An individual's way of regarding, understanding, or interpreting something, and factors that influence it [e.g., media use and sources, social group and other sources of information]
- **Preparedness:** Encompasses the planning for and response to public health emergencies and disasters
- **Risk Reduction Behaviors:** Actions taken by an individual or population to reduce risk of disease or other health impact [e.g., mask wearing, social distancing, PPE use, vaccination (incl. attitudes towards, adverse event outcomes)]
  - **Vaccine-Related:** Includes issues of development, dissemination/access, perceptions, adverse reactions, efficacy, etc.
- **Social Determinants of Health:** The conditions in which people are born, grow, live, work and age. [Includes low literacy, English proficiency, immigration status, annual

family income, occupational prestige, access to health services] Race/ethnicity, age, gender identity are also social determinants of health but should be selected separately if the focus of Resource/Research is on one of those aspects specifically, and not as part of the broader Social Determinants concept.

- **Social Support/Resilience**: Factors that contribute to the ability of an individual or community to cope with and adapt to stresses such as social, political, environmental, or economic change
- **Symptoms**: Questions or sampling related to experiencing symptoms of an exposure or disease
- **Travel History**: Record of an individual's geographic movements over a specified period of time