

# Clinical Information (form E)

Please complete the survey below.

Thank you!

## INSTRUCTIONS:

1. This form is to be filled out by an anesthesiologist or other health care provider however, if you as the patient have the following information please complete the form to the best of your ability.
2. Complete this form each time you suspect a patient may have experienced an adverse metabolic reaction to anesthesia or exercise, possibly related to malignant hyperthermia (MH). Examples: hypercarbia, acidosis, tachycardia, rigidity, hyperkalemia, myoglobinuria, arrhythmias, unexplained fever.
3. Please fill out as soon as patient is stable, preferably within 48 hours of the event.
4. The attending anesthesiologist or other physician should review the completed CLINICAL INFORMATION survey.
5. If you do not know the patient's name or do not have the consent from the patient, you don't have to fill out the PARTICIPANT INFORMATION surveys. You are allowed to complete merely CLINICAL INFORMATION surveys.
6. If a patient wishes to be registered by name, they may contact the Registry directly by referring his/her case ID of AMRA event.
7. For FULMINANT MH cases refer the patient for a blood test that assesses genetic risk of MH. This may also help diagnose MH susceptibility in other family members.
8. In the case of fatal, fulminant MH, muscle should be examined by the autopsy pathologist for genetic defects related to MH and the patient's next of kin should consider calling the MH Registry.
9. Please download the completed form at end of survey for your records.

## HEALTHCARE PROVIDER CONTACT INFORMATION

(to be completed by the anesthesiologist/physician/CRNA)

**You have completed ... (of Form E - Clinical Information)**

**10%**

E1.1 - Healthcare provider's first name

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E1.2 - Healthcare provider's last name

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E1.3 - Healthcare provider's middle name

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E1.4 - if you are reporting provider, what type of facility?

- Hospital
- Ambulatory Surgical Facility located on hospital campus
- Free-standing ambulatory surgical facility
- Dental Office
- Surgical Office
- Other (specify)

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E1.4.1 - If other, please specify

\_\_\_\_\_

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E1.5 - Hospital/facility name:

\_\_\_\_\_

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E1.6 - Is it a VA hospital?

- Yes
- No

---

E1.7 - Street of provider's location

\_\_\_\_\_

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E1.8 - City of provider's location

\_\_\_\_\_

E1.9 - State/Province/International country of provider's location

- Alabama
- Alaska
- American Samoa
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Guam
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Marshall Islands
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Palau
- Pennsylvania
- Puerto Rico
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming
- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan
- Yukon Territory

Other international country

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If other, which international country:

\_\_\_\_\_

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E1.10 - Zip/Postal Code of provider's location

\_\_\_\_\_

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E1.11 - Country of provider's location

- USA
- Canada
- Mexico
- Other (specify)

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E1.11.1 - If other, please specify:

\_\_\_\_\_

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E1.12 - Office phone number

\_\_\_\_\_

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E1.13 - Email address

\_\_\_\_\_

**CLINICAL OVERVIEW**

**You have completed ... (of Form E - Clinical Information)**

**30%**

E2.1 - General anesthetic induction method

- inhalation
- intravenous
- not applicable
- other (specify)

E2.1.1 - If other, please specify:

\_\_\_\_\_

E2.2.yr - Anesthesia induction year

\_\_\_\_\_  
(for example, 2017)

E2.2.m - Anesthesia induction month

\_\_\_\_\_  
(for example, 12)

E2.2.day - Anesthesia induction day

\_\_\_\_\_  
(for example, 25)

E2.2.2 - Anesthesia induction time

\_\_\_\_\_  
(for example, 18:30)

E2.3.yr - Anesthesia stop year

\_\_\_\_\_  
(for example, 2017)

E2.3.m - Anesthesia stop month

\_\_\_\_\_  
(for example, 12)

E2.3.d - Anesthesia stop day

\_\_\_\_\_  
(for example, 25)

E2.3.2 - Anesthesia stop time

\_\_\_\_\_  
(for example, 18:30)

E2.4.1 - Duration of anesthetic medication administration (total hours):

\_\_\_\_\_  
(hrs (e.g. 3 hrs))

E2.4.2 - Duration of anesthetic medication administration (additional mins):

\_\_\_\_\_  
(mins)

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E2.5.1 - Total anesthesia duration (total hours):

\_\_\_\_\_ (type in hours only (e.g. 2))

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E2.5.2 - Total anesthesia duration (additional mins):

\_\_\_\_\_ (type in additional minutes only (e.g. 20))

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E2.6 - Type(s) of procedure scheduled?  
(check all applicable)

- cardiothoracic with bypass
  - cardiothoracic without bypass
  - dental
  - ear, nose, or throat
  - eye
  - general surgery
  - gynecology
  - laparoscopic surgery (specify)
  - neurosurgery
  - obstetrics
  - oral surgery
  - orthopedic
  - plastic surgery
  - radiology
  - robot-assisted surgery
  - thoracic surgery
  - thoracoscopic surgery
  - transplant (specify type)
  - trauma
  - urology
  - vascular
  - other (specify)
  - unknown
- 

E2.6.1 - If laparoscopic surgery, please specify:  
(e.g. abdominal or pelvic, etc.)

\_\_\_\_\_

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E2.6.2 - If transplant, please specify type:

\_\_\_\_\_

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E2.6.3 - If other, please specify:

\_\_\_\_\_

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E2.7 - Was the procedure an emergency?

- Yes
- No

**ADVERSE METABOLIC REACTION TO ANESTHESIA (AMRA)**

**You have completed ... (of Form E - Clinical Information)**

**50%**

E3.1 - Did the Participant experience an Adverse Metabolic Reaction to Anesthesia?

- Yes
- No

E3.2.1 - the year that the patient experienced Adverse Metabolic or Muscular Reaction

\_\_\_\_\_ (enter year only (e.g. 2017))

E3.2.2 - the month that the patient experienced Adverse Metabolic or Muscular Reaction

\_\_\_\_\_ (enter month only (e.g. 12))

E3.2.3 - the day that the patient experienced Adverse Metabolic or Muscular Reaction

\_\_\_\_\_ (enter day only (e.g. 25))

E3.5 - State, Province, or country of patient's residence at time of incident

- Alabama
- Alaska
- American Samoa
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Florida
- Georgia
- Guam
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Marshall Islands
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Palau
- Pennsylvania
- Puerto Rico
- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming
- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan
- Yukon Territory



Other, international country

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If other, which international country:

\_\_\_\_\_

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E3.6 - Hospital at time of incident:

\_\_\_\_\_

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E3.7 - Type of anesthetic prior to AMRA  
(check all applicable)

- monitored anesthesia care
- regional anesthesia
- spinal anesthesia
- epidural anesthesia
- general anesthesia without endotracheal intubation
- general anesthesia with endotracheal intubation
- general anesthesia with a face mask
- general anesthesia with a laryngeal mask airway
- tourniquet use

---

E3.7.1 - If tourniquet used, what's the date and time inflated?

\_\_\_\_\_ (Do not enter value)

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E3.7.1yr - If tourniquet used, what's the year inflated?

\_\_\_\_\_ (example - 2017)

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E3.7.1mth - If tourniquet used, what's the month inflated?

\_\_\_\_\_ (example - December = 12)

---

E3.7.1day - If tourniquet used, what's the day inflated?

\_\_\_\_\_ (example - 25)

---

E3.7.1tm - If tourniquet used, what's the time inflated?

\_\_\_\_\_ (2pm = 14:00)

---

E3.7.2 - If tourniquet used, what's the date and time finally released?

\_\_\_\_\_ (Do not enter value)

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E3.7.2yr - If tourniquet used, what's the year finally released?

\_\_\_\_\_ (example - 2017)

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E3.7.2mth - If tourniquet used, what's the month finally released?

\_\_\_\_\_ (example - December = 12)

---

E3.7.2day - If tourniquet used, what's the day finally released?

\_\_\_\_\_ (example - 25)

E3.7.2tm - If tourniquet used, what's the time finally released?

\_\_\_\_\_ (2pm = 14:00)

E3.8 - Did this adverse reaction occur without exposure to anesthetic?

- Yes  
 No

E3.8.1 - If yes, please add details:

\_\_\_\_\_

E3.9 - Was the environment hot when this reaction occurred?

- Yes  
 No

E3.9.1 - If yes, how hot?

\_\_\_\_\_ (C)

E3.10 - Was any infection present at the time of this reaction?

- Yes  
 No  
 Unknown

E3.10.1 - If infection was present, what organisms were known to be present? (specify)

\_\_\_\_\_

E3.11 - Where was the reaction noted to occur?

- pre-operative holding area  
 in the operating room  
 in the intensive care unit  
 in a remote location (e.g. GI suite, radiology)  
 in the post-anesthesia care unit  
 other (specify)  
(check one)

E3.11.1 - If other, please specify:

\_\_\_\_\_

E3.12 - After adverse metabolic or muscular reaction was noted, the procedure was:

- deferred  
 terminated before all scheduled procedures completed  
 completed in spite of reaction  
 not applicable - patient was in transport at time reaction occurred  
 not applicable - patient in recovery or intensive care area at time of reaction  
 not applicable - surgery completed but patient still under anesthesia in OR

**CLINICAL IMPRESSION****You have completed ... (of Form E - Clinical Information)****70%**

E4.1 - Patient experienced  
(opinion of attending anesthesiologist):  
(check one)

- adverse metabolic reaction that was not related to MH  
 possible MH - may include masseter spasm (MH diagnostic center referral recommended)  
 fulminant MH - (family counseling, MH diagnostic center referral recommended)  
 other (specify)

E4.1.1 - If other, please specify \_\_\_\_\_

E4.2 - Was the patient and his/her family referred to one of the following MH diagnostic centers?

- Yes  
 No  
 Unknown

**E4.2.1 - MH DIAGNOSTIC CENTER DIRECTORY**

University of Minnesota  
 Paul A. Iaizzo, PhD, FHRS  
 420 Delaware St. SE  
 B172 Mayo, MMC 195  
 Minneapolis, MN 55455  
 Tel: 612-624-7912 (Dr. Iaizzo)  
 Email: iaizz001@umn.edu

UC Davis MH Biopsy Testing Center  
 Timothy Tautz, MD, Director  
 UCDCM Department of Anesthesiology  
 4150 V St.  
 PSSB Suite 1200  
 Sacramento, CA 95817  
 Tel: 916-734-2432  
 Email: tjtautz@ucdavis.edu

Uniformed Services University of the Health Sciences  
 4301 Jones Bridge Road  
 Bethesda, MD 20814  
 LCDR Michael Lee, MC USN  
 CAPT Dale F. Szpisjak MC, USN (back up)  
 Tel: 301-295-3140  
 Email: MHLab@usuhs.edu

Toronto General Hospital  
 Sheila Riazi, MSc, MD, FRCPC  
 Department of Anesthesia/Pain Mgmt  
 University Health Network  
 2 Elizabeth Street, Room E3-323  
 Toronto, ON M5G 2C4  
 Canada  
 Tel: 416-340-3128  
 Email: Sheila.riazi@uhn.ca

Wake Forest Baptist Medical Center  
 Joseph Tobin, MD  
 12750 291127411

Department of Anesthesiology  
Medical Center Boulevard  
Winston-Salem, NC 27157  
Tel: 336-716-4497  
Contact: Sherry Meacham  
Email: smeacham@wakehealth.edu

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E4.3 - If referred to a MH diagnostic center, please select which one:

- Wake Forest Baptist Medical Center (Winston-Salem, NC)
  - Uniformed Services University of the Health Sciences (Bethesda, MD)
  - UC Davis MH Biopsy Testing Center (Davis, CA)
  - University of Minnesota (Minneapolis, MN)
  - Toronto General Hospital (Toronto, ON)
  - Other, please specify below
- 

E4.3.1 - Other MH Diagnostic Center:

\_\_\_\_\_

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E4.4 - Were the patient and the family also referred to MHAUS?

- Yes
- No

PO Box 1069  
Sherburne, NY 13460-1069  
(1-800-986-4287)

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E4.5 - COMMENTS ON PATIENT (Optional):

\_\_\_\_\_

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Congratulations. You have completed ... (of Form E - Clinical Information)  
100%