HUMAN GRANULOCYTIC ANAPLASMOSIS **NON-IMMEDIATE NOTIFICATION** **EPIDEMIOLOGY PROGRAM**

Event Name:	HGA	
Event Time Period:	1 year	
Clinical Description (CDC 2008)	Human Granulocytic Anaplasmosis is characterized by fever and one or more of the following: headache, myalgia, anemia, leukopenia, thrombocytopenia, or any hepatic transaminase elevation.	
CDC Event Classification (2008):	*Confirmed*	Clinically compatible with one of the following laboratory criteria: 1. Serological evidence of a four-fold change in IgG specific antibody titer to *A. phagocytophila* antigen by indirect immunofluorescence assay (IFA) in paired serum samples (one taken in first week of illness and a second 2-4 weeks later), **OR** 2. Detection of A. phagocytophilum DNA in a clinical specimen via amplification of a specific target by polymerase chain reaction (PCR) assay**, OR** 3. Demonstration of anaplasmal antigen in a biopsy/autopsy sample by immunohistochemical methods, **OR** 4. Isolation of A. phagocytophilum from a clinical specimen in cell culture.
	Probable	Clinically compatible with one of the following laboratory criteria: 1. Serological evidence of elevated IgG or IgM antibody reactive with *A. phagocytophilum* antigen by IFA, ELISA, dot-ELISA, or assays in other formats, **OR** 2. Identification of morulae in the cytoplasm of neutrophils or eosinophils by microscopic examination
	Suspect	A case with laboratory evidence of past or present infection, but no clinical information available
Massachusetts Event Classification (2014):	Follows the CDC event classification except when determining clinical compatibility, any of the following reported symptoms will be considered subjective evidence of hepatic transaminase elevation when liver function test values are not available: anorexia, nausea, vomiting or abdominal pain.	

HUMAN GRANULOCYTIC ANAPLASMOSIS (continued)

Report Type	Test Type	Source	Result	New event or beyond report period?	Data Entry
Laboratory Report	Culture	Clinical specimen	*Ehrlichia phagocytophila* **OR** *Anaplasma phagocytophila*	Yes	New event SUSPECT
				No	Same event
Select:	Microorganism : PrId : Pt : xxx : Nom : Culture				
Laboratory Report	IFA	Clinical specimen	Positive for *Anaplasma phagocytophila* **OR** Human granulocytic ehrlichiosis	Yes	New event SUSPECT
				No	Same event
Select (total or not IgM/IgG specific):	Human granulocytic ehrlichiosis Ab : Titr : Pt : Ser : Qn : IF				
Select (IgG-specific):	Human granulocytic ehrlichiosis Ab.IgG : Titr : Pt : Ser : Qn : IF				
Select (IgM-specific):	Human granulocytic ehrlichiosis Ab.IgM : Titr : Pt : Ser : Qn : IF				
Laboratory Report	EIA	Clinical Specimen	Positive for *Anaplasma phagocytophila* or human granulocytic ehrlichiosis	Yes	New event SUSPECT
				No	Same event
Select (total or not IgM/IgG specific):	Ehrlichia phagocytophila Ab : ACnc : Pt : Ser : Ord : EIA				
Select (IgG-specific):	Human granulocytic ehrlichiosis IgG: ACnc: Pt: Ser: Ord: EIA				
Select (IgM-specific):	Human granulocytic ehrlichiosis IgM: ACnc: Pt: Ser: Ord: EIA				
Laboratory Report	PCR	Clinical specimen	Positive for *Anaplasma phagocytophila* **OR** Human granulocytic ehrlichiosis	Yes	New event SUSPECT
				No	Same event
Select:	Ehrlichia phagocytophila DNA : ACnc : Pt : Bld : Ord : Probe.Amp.Tar				
Laboratory Report	IgG or IgM *method not specified***	Clinical Specimen	Positive for *Anaplasma phagocytophila* or human granulocytic ehrlichiosis	Yes	New event SUSPECT
				No	Same event
Select (IgM-specific):	Anaplasma phagocytophilum Ab.IgM : ACnc : Pt : xxx : Ord :				
Select (IgG-specific):	Anaplasma phagocytophilum Ab.IgG : ACnc : Pt : xxx : Ord :				

**** Data Entry Notes**

If an HGA laboratory result is received that includes a smear or stain test type, please bring it to the Epi Liaison. These test types may have results such as "leukocyte **inclusions** consistent with anaplasma", "neutrophilic inclusions consistent with Anaplasmosis", "**morulae** consisten with Anaplasma sp.", etc.

Quest & FOCUS Labs

May not specify the methodology; however, this lab performs IFA antibody testing for HGA.