**Case Report Form for Histoplasmosis Enhanced Surveillance**

**CASE AND INTERVIEW INFORMATION** *(This section is for interviewer use only – do not read)*

1. Date case was reported to the state health department (MM/DD/YY): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Interview date (MM/DD/YY): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Or** □ Case-patient not interviewed (reason):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Interviewer initials:\_\_\_\_\_\_\_\_
4. Interview conducted with:

□ Case-patient

□ Other, specify relationship: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If interview was conducted with a proxy for the case-patient, indicate reason(s)

□ Case-patient unavailable

□ Case-patient is <18 years old

□ Case-patient deceased

 How did histoplasmosis contribute to the death?

□ Histoplasmosis was the primary cause of death

□ Histoplasmosis was a related cause of death

□ Death was unrelated to histoplasmosis

□ Unknown

□ Other reason interview conducted with someone other than case, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**DEMOGRAPHICS**

First, I’m going to ask some questions about yourself (*Or case name, if interview conducted with someone else*).

1. What is your (*or name of case, if not interviewing case*) date of birth? (MM/DD/YYYY): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What sex were you assigned at birth, on your original birth certificate: □ Male □ Female □ Refused □ Don’t know

**DIAGNOSIS, CLINICAL PRESENTATION, AND HEALTHCARE USE**

1. Before this phone call, did you know about your positive test result [*or diagnosis, for probable cases without laboratory testing*] for histoplasmosis?

□ Yes □ No □ Don’t know

I’m going to be asking you some questions about dates. Do you have a calendar that you could look at?

1. Did you have symptoms of histoplasmosis? *(if needed, prompt using the symptom list below)*

□ Yes □ No *(Skip to question 14)* □ Don’t know

8a. *(If yes)* What date did your symptoms start? MM/DD/YY:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ □ Don’t know

1. Which of the following symptoms did you have? I’m going to read a list. *(Check all that apply)*

□ Fever □ Cough

□ Sore throat □ Coughing up blood

□ Chills □ Shortness of breath

□ Night sweats □ Wheezing

□ Chest pain □ Rash or other skin problem

□ Extreme tiredness □ Stiff neck

□ Headache □ Joint pain

□ Weight loss without trying □ Muscle pain

□ Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What date did you first seek medical care for your symptoms? MM/DD/YY:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ □ Don’t know
2. Where did you first get medical care for your symptoms?

□ Primary care office

□ Urgent care clinic

□ Emergency room

□ Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Did you ever go to the emergency room for your symptoms? □ Yes □ No □ Don’t know
2. How many times did you see a doctor or other healthcare provider for your symptoms before you were tested for histoplasmosis? \_\_\_\_\_\_\_ times □ Don’t know
3. Did you ask a doctor or other healthcare provider to test you for histoplasmosis? □Yes □No □Don’t know
4. Which type of healthcare provider first tested you for histoplasmosis? I’m going to read a list.

□ Primary care doctor, nurse practitioner, or physician assistant

□ Urgent care doctor

□ Emergency room doctor

□ Infectious disease doctor

□ Pulmonologist (lung specialist)

□ Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Unknown

1. What date did your healthcare provider tell you that you had histoplasmosis?

MM/DD/YY:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ □ Don’t know □ Didn’t tell me I had histoplasmosis

1. In what city and state was the healthcare provider who told you that you had histoplasmosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Did your healthcare provider diagnose you with another illness before he/she diagnosed you with histoplasmosis?

□ Yes, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ □ No □ Don’t know

1. Did your doctor prescribe you antibiotics before he/she diagnosed you with histoplasmosis? By “antibiotics,” I mean medicine to treat bacterial infections, which doesn’t work for histoplasmosis.

□ Yes □ No □ Don’t know

1. Were you ever hospitalized overnight for histoplasmosis? □ Yes □ No □ Don’t know

20a. *(If yes)* How long were you hospitalized? *(#)*\_\_\_\_\_\_\_days

1. Did your doctor do a chest x-ray or CT scan when diagnosing your illness? □ Yes □ No □ Don’t know
2. When your doctor told you that you had histoplasmosis, which parts of the body did he or she say were involved? I’m going to read a list. *(Check all that apply)*

□ Lungs

□ Brain or spinal cord

□ Bones or joints

□ Whole body

□ Other *(Specify)*:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ The test was positive, but no specific body part was involved

□ The doctor didn’t tell me / I don’t know

**TREATMENT AND OUTCOMES**

1. Did your doctor prescribe you antifungal medicine(s) to treat histoplasmosis? □ Yes □ No □ Don’t know

23a. *(If yes)* What was the name of the medicine(s)? I’m going to read a list. *(Check all that apply)*

□ Amphotericin B, given IV in hospital □ Voriconazole (VFEND)

□ Fluconazole (Diflucan) □ Other, specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Itraconazole (Sporanox) □ Don’t know

□ Posaconazole

23b.How long did you take antifungal medicine(s) to treat histoplasmosis?

*(#)*\_\_\_\_\_\_\_days *(#)*\_\_\_\_\_\_\_weeks *(#)*\_\_\_\_\_\_\_months □ Still taking *(see 23c)*

23c. *(If still taking antifungals)* How long did your doctor say you need to take antifungal medicine, in total?

*(#)*\_\_\_\_\_\_\_days *(#)*\_\_\_\_\_\_\_weeks *(#)*\_\_\_\_\_\_\_months □ Don’t know

1. Total, how long did your histoplasmosis symptoms last?

*(#)*\_\_\_\_\_\_\_days *(#)*\_\_\_\_\_\_\_weeks *(#)*\_\_\_\_\_\_\_months

□ Not yet recovered □ Don’t know □ Not applicable; no symptoms

1. Did you have a job or were you in school when you got histoplasmosis?

□ Yes, a job , specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ □ Yes, in school □ No

25a. *(If yes)* Did you miss any time from your job or school due to histoplasmosis?

 □ Yes, (*#)*\_\_\_\_\_\_\_days □ No □ Don’t know

1. Did histoplasmosis interfere with your ability to do your usual daily activities?

□ Yes □ No □ Don’t know

26a. *(If yes)* For how long? *(#)*\_\_\_\_\_\_\_days *(#)*\_\_\_\_\_\_\_weeks *(#)*\_\_\_\_\_\_\_months □ Don’t know

**MEDICAL HISTORY**

Now I’m going to ask some questions about your overall health and any past medical problems.

1. Have you ever smoked tobacco, such as cigarettes, cigars, or pipes?

□ Yes, currently □ Yes, in the past □ No □ Unknown

1. Did you have any of the following medical conditions when you were diagnosed with histoplasmosis? I’m going to read a list.

□ Asthma requiring an inhaler

□ Autoimmune disease, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ COPD or emphysema

□ Other lung disease, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Diabetes

□ HIV/AIDS. If yes: were you taking HIV medicine (antiretroviral therapy) when you got histoplasmosis?\_\_\_\_

□ Heart disease, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Cancer, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Organ transplant or bone marrow transplant, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Liver disease

□ Kidney disease

□ Pregnancy

□ Other major illnesses, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Unknown

1. Before you were diagnosed with (*or had a positive test for*) histoplasmosis, were you taking any medications that affect your immune system? Examples are steroids such as prednisone or dexamethasone, interferon, chemotherapy medications, methotrexate, medications to prevent organ transplant rejection, or any TNF inhibitor such as Remicade, Enbrel, or Humira.

□ Yes □ No □ Don’t know

29a. *(If yes)* What medication(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

From \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(MM/YY) to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(MM/YY) or □ still taking

1. Before this diagnosis of histoplasmosis, had a doctor ever told you that you had histoplasmosis in the past?

□ Yes □ No □ Don’t know

30a. *(If yes)* When? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*(approximate date)*

**RESIDENCE AND EXPOSURES**

My next set of questions is about where you live and your activities.

1. What city and state did you live in when you were diagnosed with histoplasmosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

31a. How long had you lived in *(state named above)* before you were diagnosed with histoplasmosis?

*(#)*\_\_\_\_\_\_\_months *(#)*\_\_\_\_\_\_\_years

1. Is your home located in an urban, suburban, or rural area? □ Urban □ Suburban □ Rural □ Don’t know
2. In the one month before your first symptoms of histoplasmosis*,* did you travel out of your home state? *(If no symptoms, please ask about month before diagnosis by laboratory test.)*

□ Yes, specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ □ No □ Don’t know

1. In the one month before your first symptoms of histoplasmosis, did you do any of the following activities, or were you near any of the following activities? *(If no symptoms, ask about month before diagnosis by laboratory test. Check all that apply. If yes to any, ask in what city/state or city/country if outside the U.S., and ask specifically where, e.g., home/work, another building, name of cave, etc.)*

□ Dig in soil City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Go in a barn City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Go in a cave City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Handle bird poop City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Handle bat poop City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Clean a chicken coop City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Construction City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Demolition or renovation City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Excavation City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Clean attic or chimney City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Hiking City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Hunting City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Camping City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Heating or air conditioning work City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Gardening or landscaping City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Other handling of plants or trees City/state:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Describe:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Other exposures to birds, bats, or soil disruption? City/state:\_\_\_\_\_\_\_\_\_\_\_ Specific location:\_\_\_\_\_\_\_\_\_\_\_

Describe:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Has anyone else you know also recently been diagnosed with histoplasmosis?

□ Yes, specify who/when:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ □ No □ Don’t know

1. Did you know about histoplasmosis before you were diagnosed with it *(or tested positive* *for it*)?

□ Yes □ No □ Don’t know

36a. (*If yes*)How did you first hear about it? *(e.g., the Internet, a family member, TV, etc.)*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How and where do you think that you got histoplasmosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I have a few more questions about yourself (*or name of case, if not interviewing case*).

1. Are you Hispanic or Latino? □ Yes □ No □ Refused
2. Which of the following best describes your race? I’m going to read a list, and you can pick more than one.

□ White

□ Black or African American

□ Asian

□ American Indian or Alaska Native

□ Native Hawaiian or Other Pacific Islander

□ Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Refused

**INSURANCE, EDUCATION, AND INCOME**

We’re almost done. Thanks for your patience. I just have a few more questions for you, which are about your health insurance and education.

1. When you got histoplasmosis, did you have health insurance? □ Yes □ No □ Don’t know
2. How far did you go in school? I’m going to read a list of choices.

□ No high school

□ Some high school

□ High school graduate / GED

□ Technical school / certificate / apprenticeship

□ Some college / associate degree

□ College graduate / bachelor’s degree

□ Post-graduate / professional degree

□ Don’t know

□ Refused

1. Because income can affect a person’s ability to receive healthcare, I’d like to ask you about your total yearly household income from all sources. Which income group best represents the total yearly income for your household when you had histoplasmosis? I’m going to read a list, and you can stop me when I get to the right category.

□ Less than $15,000

□ Between $15,001 and $25,000

□ Between $25,001 and $35,000

□ Between $35,001 and $50,000

□ Over $50,000

□ Refused

That’s all the questions I have for you. Thank you very much for your time. Do you have any questions for me?

 *(Record any questions here)*:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Interviewer notes; attach additional notes pages as needed*:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**DIAGNOSIS OF HISTOPLASMOSIS** *Please record all histoplasmosis laboratory test results below.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test type** | **Specimen type** | **Collection date**  | **Result** | **Value, if applicable** | **Laboratory that performed the test** |
| Complement fixation |  |  | □pos □neg □unk | Titer:\_\_\_\_\_\_\_ |  |
|  |  | □pos □neg □unk | Titer:\_\_\_\_\_\_\_ |  |
|  |  | □pos □neg □unk | Titer:\_\_\_\_\_\_\_ |  |
| Immunodiffusion, H band |  |  | □pos □neg □unk |  |  |
|  |  | □pos □neg □unk |  |  |
|  |  | □pos □neg □unk |  |  |
| Immunodiffusion, M band |  |  | □pos □neg □unk |  |  |
|  |  | □pos □neg □unk |  |  |
|  |  | □pos □neg □unk |  |  |
| Antigen, EIA |  |  | □pos □neg □unk | \_\_\_\_ng/ml or index:\_\_\_\_ |  |
|  |  | □pos □neg □unk | \_\_\_\_ng/ml or index:\_\_\_\_ |  |
| Antigen, LFA |  |  | □pos □neg □unk | Concentration:\_\_\_\_\_\_\_\_\_ |  |
| Culture |  |  | □pos □neg □unk |  |  |
| DNA probe for culture confirmation |  |  | □pos □neg □unk |  |  |
| Histopathology |  |  | □pos □neg □unk |  |  |
| PCR |  |  | □pos □neg □unk |  |  |
| Cytopathology/smear |  |  | □pos □neg □unk |  |  |

Record any additional lab test results here: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Additional questions related to diagnosis**

1. Case status: □ Confirmed □ Probable (*indicate category below*)

□ Clinically-compatible case that meets non-confirmatory lab criteria

□ Case meets confirmed lab criteria, but no clinical information is available

□ Clinically-compatible case that does not meet lab criteria, but is epi-linked to a confirmed case

1. Did the provider diagnose this illness as histoplasmosis?

□ Yes (*indicate type below, if known*)

□ Acute pulmonary histoplasmosis

□ Chronic pulmonary histoplasmosis

□ Disseminated histoplasmosis

□ Other, specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Unknown

□ No, not histoplasmosis. Other diagnosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

□ Unknown, etiology unclear, or diagnosis not recorded

1. What was the reason for histoplasmosis testing?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_