Around 500 years ago, soon after Prince Henry the Navigator began his sailing school, the Portuguese began to explore Africa. During the explorers’ time in Africa, they noticed something odd about the way the Southerners and Northerners traded. When the Northern merchants came to trade with the Southerners, they would lay out their goods in a market while they themselves stayed inside their caravans, watching the buyers. The Southerners would then put gold coins down for the items they wanted until the merchants were satisfied. Then the Northerners would creep out of their caravans and take the gold, and the Southerners were allowed to take the goods.

The Northerners did this to prevent a deadly sickness that they Southerners had from affecting their men and animals. To go with this strange but
necessary trading customs, Northerners would also make sure not to venture too deep into the forests of the south; they feared for the lives of every living creature that made the trip. And rightly so; the further south you got, the more susceptible you became to a deadly sickness that we now presume to be the African Sleeping Sickness.

**History, Among Other Things**

African Sleeping Sickness has plagued the lives of many Africans for thousands of years, and while many people suspected its cause to reside with the tsetse fly (which is its actual cause, by the way), very few, if any at all, knew the cause for certain.

Accounts of the Sleeping Sickness can be traced back to the kingdom of Mali, a very wealthy and prosperous empire in West Africa, and at one point the most powerful. The word for *king* there was Mansa, and one of the most famous Mansas was a man named Mansa Musa.

![Mansa Musa, King of Mali on a European Map](http://resourcesforhistoryteachers.wikispaces.com/Key+People+WH)

Despite its riches, the nobles of Mali would often contract a strange disease that caused drowsiness during the day and then insomnia in the night. Those who were infected also had trouble concentrating, became depressed, and became overly emotional. Eventually they became too tired to eat, wasted away into a comatose state, and then died. This occurred around two or three hundred years before the first Portuguese came to Africa.

Europeans first noted the sickness in African slaves in the 1700s. Because the disease could manifest for several years, the victims could experience symptoms like the drowsiness across those several years. This fact led to the racist belief that Africans were “lazy”.
When the British started to explore Africa, they soon found that the areas they colonized were ones that had been inflicted with Sleeping Sickness. The disease spread rapidly because the British had no immunity against it at all. Constant contact with the tsetse fly and modernizing projects such as railroading also meant faster spreading.

Before the late 1800s, African Sleeping Sickness had been isolated in a few small areas of Africa, and it did not spread because the indigenous people that lived in infected areas did not travel all that much. However, that changed as Henry Morton Stanley began exploring the Congo basin. Other explorers, traders, and slavers followed his path, spreading the disease as they traveled. This eventually led to the massive break out in Uganda that killed more than 200,000 people many years later.

The cause of the disease and vector (i.e. what transmits the disease) were discovered in the early 1900s by Sir David Bruce. The discovery of the three different strains of the disease was made in 1910, and the first drug to help treat the disease, atoxyl, was developed in that year as well.

All That Technical Stuff

African Sleeping Sickness is more formally known as **African Trypanosomiasis**. The parasite that actually causes the disease is known as **Trypanosoma brucei**, and the tsetse fly, which transmits the disease into humans, is part of the genus **Glossina**.

Symptoms

African Sleeping Sickness messes with the mind. Many people with the disease are forgetful, distracted, can't sleep at night and often feel drowsy during the day, as the nobles in Mali were. Symptoms also include severe headaches, inability to concentrate or focus, tremors, paralysis, and loss of appetite (They become too sleepy to eat in the day, and then too distracted to eat at night).

**Trypanosoma brucei**

*Trypanosoma brucei* (abbreviated as *T. brucei*) is a trypanosome; an organism from the order Trypanosomatid. Trypanosomes are **protists**. Their name, which means auger-body, comes from the way they move; they twist and
turn, like augers. Trypanosomes are transparent, snake-like, and twice as long as a red blood cell. The front end of the parasitic protist is a bit pointy, while the other ends in a flagellum. *T. brucei* uses its flagellum to get around. On either side of it there is a sort of cross between fins and wings that wriggle as they move.

When *Trypanosoma brucei* is first ingested by the tsetse fly and then transmitted into the next host’s blood stream by the fly’s bite, it is a round cell called an amastigote. Inside the fly’s stomach, it begins to reproduce by binary fission. At that point they are not harmful. When they reach adulthood they are known as promastigotes. Then the protest moves to the fly’s salivary glands, so when the tsetse fly bites, the full-grown *T. brucei* will move into the blood stream of the bitten organism.

When the *T. brucei* enters the bloodstream, the immune system of this final host, a human, attacks the parasitic protist. Then its cell changes its composition, so that the immune system has to backtrack and adjust to the “new” invader. But by the time the immune system is able to fend off the protist with the new configuration, the parasite has created another one. This cycle repeats, and it is in this way that the host gets tired; the parasite is wearing a person’s body defenses out.

Eventually the parasite makes its way to the brain. The damage that it does there results in the neurological symptoms, such as distraction and lack of focus.

As stated before, *T. brucei* is transmitted through the tsetse fly. This fly lives in rural areas, specifically the woodlands and thickets in the savannahs of East Africa and the forest and vegetation along streams in West Africa. Besides being passed through the tsetse fly, *T. brucei* can also be passed from a pregnant woman to her unborn child. Although these cases are not recorded very often, in theory, the disease can be passed through sexual contact or blood transfusions.
West and East

There are two types of human-infecting Sleeping Sickness: East African Sleeping Sickness and West African Sleeping Sickness. There is also an animal-affecting strain, called nagana, which infects vertebrates.

The subspecies of *Trypanosoma brucei* that causes the East African strain is called *T. b. rhodesiense*. It can be found in eastern and south eastern Africa. Over 95% of all human cases of East African Sleeping Sickness are found in Tanzania, Uganda, Malawi, and Zambia. *T.b. gambiense* causes the West African strain, and is found mostly in central Africa and some parts of West Africa. Most of all African Sleeping Sickness cases are caused by this parasite. Over 95% of human infections are found in the Democratic Republic of the Congo, Angola, Sudan, the Central African Republic, Chad, and northern Uganda.
Both types do not show outward signs for one to two weeks. Some early signs include fevers that come and go, aches and pains, and swelling of the neck. This is called Winterbottom's sign, and it is one of the main ways doctors are able to diagnose a person with the disease.

One major difference between the East and West strains is that the East African causes the person who is infected to die quickly; however, those with the West strain as about a two-three-year life expectancy.

**Prevention and Treatment**

The drugs *pentamidine*, *eflornithine*, and *suramin* for early stages of the disease are used for the West African strain. *Eflornithine*, is also used for the East African strain, and so is *melarsoprol*, but this one is used only *after* the brain is attacked by the parasite. Unfortunately, all the cures are poisonous to some degree and all the inject45rtyytions are painful, especially melarsoprol. On the other hand, all strains of Sleeping Sickness can be at least part-cured.

Many people who spot the tsetse fly in their area move to higher ground to avoid it. One way to try and keep them away is to kill their habitat, which was a very common method in British East Africa. DDT was used to kill the tsetse in the 1950s and 1960s, though not anymore. Gamma radiation is used to sterilize male tsetse fly, which stops reproduction. Another helpful factor to stopping the disease is that female tsetse flies can only lay one egg in their lifetime.

**More Recently…**

One major outbreak that took place in Uganda began in 1900; it lasted six years, and more than 200,000 people died from the disease.

Once the disease was better understood, it began to become less common and more controlled. However, the sickness has started to pick up again in recent years. Currently, about 300,000 people a year die from the disease. Slow research and drug production, and the fact that affected area are too poor to buy the drugs needed for cures are both contributing factors to the spike.
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