FACTS
• 4.5 billion people face uncontrolled risk of AF exposure and PCRSUS has found widespread chronic dietary exposure in Africa.
• Peanuts and many staple foods are contaminated with AF at levels above those allowable for trade.
• Maize is one of the greatest sources of AF exposure.
• Strategies addressing AF and other mycotoxins generally occur only after large scale extreme contamination events.
• Mycotoxin exposure is not visible or easily tested, and thus remains a silent threat to most Africans.
• Research supported by PCRSUS has found significant links between health, immunity, HIV and these mycotoxins.

High AF levels cause:
• Suppressed immunity
• Decreased vitamin A, E
• Increased malaria infection
• Modified immunity in HIV suggesting rapid progression and higher transmission
• Increased TB in HIV patients
• Increased maternal anemia
• Increased poor pregnancy outcomes
• More underweight children under 5 years old

MYCOTOXINS
What are mycotoxins?
They are contaminants of food produced by molds. There are at least two common mycotoxins connected to the HIV epidemic, Aflatoxin (AF) and Fumonisin (FN).

Where are they found and who is exposed?
These toxins are found in many foods but particularly important for peanuts (AF) and corn (AF and FN). People in areas with high consumption of these two foods are at greatest risk for mycotoxin exposure.

What do these mycotoxins do?
FN promotes esophageal cancer and makes membranes porous. AF promotes liver cancer and suppresses immunity and nutritional status. Therefore both of these toxins influence the occurrence of infections and the course of diseases.

APLATOXIN: AN INVISIBLE FACTOR IN HEALTH
AF is clearly an immune suppressing agent, and HIV positive people with above median exposure have significantly lower immunity than their peers with less AF. Effectively, AF accelerates progression of the disease. Associated with this double immune suppression is a greater risk of active TB. Perhaps because of economic stress, HIV+ Ghanaians have greater exposure than their unaffected peers. AF is rarely tested for, nor do visually obvious symptoms appear when individuals are exposed to prevailing levels. Exposure is reflected in higher rates of easily diagnosed infectious diseases, like malaria.

When food is scarce, all food is consumed, even contaminated food.