Thank you, Chairman Roberts, Ranking Member Stabenow and members of the Senate Committee on Agriculture, Nutrition and Forestry.

I am Dr. Tom Elam, president of FarmEcon LLC, an agricultural economics consulting company in Carmel Indiana. My specialty is poultry. I would like to summarize findings that are in my written testimony, and make two recommendations for your consideration.

For the past several months I have made a running analysis of economic effects of the High Pathogenic Avian Influenza outbreak. With dismay, I have closely followed these outbreaks as they spread from the Pacific flyway into the Upper Midwest, and damage increased to record levels.

As an economist, I deal in the hard numbers – but as an individual the hard realities faced by poultry growers who have, in many cases, lost entire flocks, is difficult to imagine.

Based on pre-outbreak wholesale prices, my estimate of producer direct loss arising from destroyed turkey and egg production is about \$1.57 billion, \$530 million for turkeys and \$1.04 billion for layers. By design, these estimated impacts exclude substantial price increases that have occurred since the outbreak hit the Upper Midwest. That estimated loss does not include cleanup, bird restocking, higher costs to consumers from post-outbreak price increases, or any further production losses past today.

The economy-wide loss for just destroyed production to date is conservatively estimated at nearly \$3.3 billion. This larger number is based on earlier University of Minnesota research. It includes estimated losses past the producer and wholesale level and into retail food stores and the foodservice sector.

These are large numbers, but do not begin to capture the impact of local damage done in the affected states.

All production losses are concentrated among relatively few farms, represented by only 223 turkey and layer locations. As bad as it is for turkey and egg consumers facing higher prices and possible product shortages, for those affected producers the losses are catastrophic. What is even more important is that there is the very real possibility of another major HPAI outbreak later this year. Based on my experience there are two priority areas that this committee should consider:

1. First and foremost, this committee and the Congress should ensure that USDA has sufficient resources to address its key public sector roles in HPAI outbreaks, namely control and prevention. USDA alone has the resources to look at this issue across the entire span of original infection sources (vertical transmission from wild birds) and farm-to-farm (horizontal flock-to-flock) transmission.

APHIS has done an incredible job in the current outbreak. However, despite its efforts, and those of producers, the virus was able to spread to a record number of flocks and birds. USDA has a key role to play in discovering how this virus managed to bypass current biosecurity measures. Our only chance of preventing further outbreaks, and if they occur limiting their scope, is to discover what went wrong, and put into place effective countermeasures to prevent another occurrence and control it better if it does.

It will take a public-private partnership to make that happen. If USDA does not have the resources to play its key role in the public arena our ability to prevent and mitigate future outbreaks will be severely compromised. If we fail current losses could be dwarfed by future outbreaks. The goal should be nothing short of complete eradication.

As part of this program we need to consider the role of vaccination as one option. To make vaccination a viable option we would need more effective products than are available at this time.

2. Secondly, for those farms and companies with lost flocks the economic impact is, relatively speaking, much more severe than nationwide statistics. Some farms have lost 100% of their turkeys. Some egg producers have lost large portions of their layers and pullets. The financial impact for these operations is staggering.

I have been consulted by turkey and egg producers on USDA indemnification payment rate issues. Based on those conversations it is apparent to me that current indemnification rates fall far short of HPAI's realistic economic damages. The question needs to be asked by this committee, "Do current USDA indemnification payment rates meet the intent of Congress?"

It is strongly suggested that Congress hold hearings on the general adequacy of USDA's HPAI indemnification payments, and specifically payment rates that have been applied to this outbreak. At a minimum, affected flock owners, industry experts, and USDA personnel who administer the program need to be involved in those hearings.

Thank you for your attention. I welcome your questions, and am pleased to remain here as a resource for this committee during this hearing.