FAQs about PZP

What is PZP?
PZP is an acronym for Porcine Zona Pellucida. It is a contraceptive vaccine. Zona pellucida (ZP) proteins surround unfertilized eggs of all mammals. Sperm must attach to ZP before an egg can be fertilized. When pig ZP (PZP) is injected into a female animal, her body produces antibodies to it. These antibodies attach to her ZP proteins, preventing sperm from attaching and thereby blocking fertilization.¹

Who gets vaccinated with PZP?
Female horses over the age of one year and/or those females that have contributed at least one foal to the herd.

Who administers PZP? How is it administered to the horses? Does it hurt the horses when they get darted?
Only individuals who have received certified training and instruction on PZP are authorized by the BLM to participate in programs to administer PZP to the horses. Instruction and training includes learning about the manufacture, handling, preparation, and delivery methods as well as meeting additional BLM field training and requirements.

PZP is administered intramuscularly in the hip region either remotely using a dart or by direct hand injection. Direct or remote injections feel similar to a human receiving an immunization shot or a sting from a stinging insect.

Who makes PZP? Where is it made?
The Science and Conservation Center at ZooMontana manufactures PZP. For more detail, see their website [http://www.sccpzp.org/](http://www.sccpzp.org/)
Other companies are working on variations of the vaccine but the original and primary source for PZP is SCC.

Why is PZP used?
Birth control for wild horses in a confined space is a necessary intervention. PZP is one of the least invasive methods for applying birth control. Wild horse populations increase approximately 20% per year. Unchecked population growth in a confined space with limited resources results in serious unintended consequences for the land and animals.

How long does PZP last in the horses?
PZP is not a drug. It is a vaccine that requires application every 1-2 years depending on the animal’s immune response.

Currently, there are two vaccination plans used with various wild animal populations. One approach is to administer two injections of PZP in the initial year, followed by annual boosters. This is what has been done with the horses on Assateague Island since 1988.⁴
Another approach is involves packaging PZP in timed-release pellets, which serve as annual boosters. Results are inconsistent for the effectiveness of this approach and research studies are in progress around this subject.

**Where is PZP used? How long has PZP been used on horses?**

PZP has been used for over 30 years on a variety of wild animal populations that include wild horses. Tests on captive animals of about 100 species in about 100 zoos and aquaria worldwide indicate that PZP works very well on a wide variety of hoof stock, including antelope, deer, wild cattle, sheep, zebra, and giraffes as well as bears and sea lions. PZP has also been given to free-roaming Tule elk at Point Reyes National Seashore, Calif., and water buffalo on the island of Guam.

**How long has the Federal government and/or the BLM been using PZP?**

The Federal government has successfully used PZP contraception on horses for approximately 30 years Assateague Island National Seashore. Within the last 10 years, the BLM has been using PZP contraception with wild horse populations in the following areas: Little Book Cliffs Wild Horse Range, Spring Creek Basin Wild Horse Herd Management Area, McCullough Peaks Herd Management Area, and Pryor Mountain Wild Horse Range.

**How long have Sand Wash Basin horses been receiving PZP?**

Approximately 60 Sand Wash Basin female horses began receiving PZP in 2008 as part of a study conducted by The Humane Society of the United States (HSUS). Study fieldwork was completed in 2012 while data collection continued through 2013. Results of this study have not yet made available.

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**Citations & Sources for Further Information**

1, 2, 3

http://www.humanesociety.org/issues/wildlife_overpopulation/qa/q_and_a_pzp.html#.UxPu5eAuf0A

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http://www.sccpzp.org/what-is-pzp/

http://www.pzpinfo.org/pzp_faqs.html