Directions for Drawing Blood Samples for Pullorum Disease Serum Agglutination Test

by

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Method of holding a chicken for drawing blood samples.

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DRAWING blood samples is an important step in providing suitable blood serum for an agglutination test for pullorum disease. During investigational work over a period of years, the "lance method" in which the wing vein is nicked has proved to be the most simple and effective method of obtaining satisfactory blood samples. The object of this circular is to aid poultrymen who wish to do this work themselves, by offering step by step the procedure to follow in drawing blood samples.

BLOOD DRAWING PROCEDURE

1. Tubes for drawing blood samples may be obtained upon request from the Poultry Disease Laboratory, Department of Veterinary Medicine, Corvallis, Oregon. Tubes are sent express collect; since the flock owner must pay shipping charges both ways on the tubes.

2. For most efficient blood drawing, a crew of five or six persons is desirable—one person to draw the blood samples; one person to check leg band numbers and to record the number of the blood sample; one person to leg band the birds if this has not been done previously; and three or more persons to catch the birds.

3. The persons catching the chickens or turkeys should pluck the small feathers from the under side of the wing in the region of the second (elbow) joint from the body which is the area from which the blood sample is taken. See illustration on cover.

4. Chickens are held easily between the legs of the bleeder when the bleeder sits on a box or stool of convenient height. The legs of the chicken are held between the legs of the bleeder with the head away from the bleeder. Turkeys are held by an assistant on a table or barrel of convenient height. The bleeder does not try to hold the turkey.

5. The most satisfactory instrument for nicking the vein is a sharp-pointed knife blade, such as the Bard-Parker No. 11 blade. A handle (size 3) to hold blade (No. 11), which is removable, may
be purchased. Or the blade may be tied to a suitable piece of
wood. The blades and handle may be purchased through most
drug stores or the Shaw Surgical Supply Company, Portland,
Oregon.

6. Extend and raise the right wing of the chicken with the left hand.
Hold the cutting edge of the knife away from you and make a
quick puncture and cut the vein just below the elbow joint. In
this region a small depression is formed by the bone of the arm
and a muscle. See illustration on cover.

7. Turkeys are prepared in a manner similar to that of chickens.
Excessive bleeding is reduced, however, if the prominent wing
vein is lanced at the point where it crosses the elbow joint rather
than in the depression below the joint where chickens are lanced.

8. Collect as rapidly as possible about 1 inch of blood (2 cubic centi-
meters) in the tube supplied for this purpose.

9. The blood tube has a label on it that should be marked with the
leg band number of the fowl to be bled. Blood samples from
male birds should be marked as such or kept separate.

10. By tearing a ribbon of newspaper 2 or 3 inches wide and laying
over the blood samples from one pen, blood samples from another
pen may be included and kept separate in the same box.

11. As soon as the sample of blood is drawn, release the bird, cork
the blood tube, wipe off blood on the outside of the blood
tube, and immediately place the tube in a horizontal position in
the box provided. This will allow the blood to clot along the
side of the tube, which is an important step in providing good
blood samples.

12. Wipe the knife blade on a clean dry towel or cloth immediately
after bleeding each bird. Antiseptics or moisture should be
avoided as they may spoil the blood sample.

13. Fill out an information sheet for each flock and enclose with
each shipment of blood samples. Return all unused tubes with
the samples.

14. Ship samples prepaid express as soon as they are drawn. Blood
samples should not be allowed to freeze or become too warm.
Temperatures from 40° F. to 60° F. are most satisfactory. Par-
cel post shipments have not been satisfactory in most cases.
15. Address all shipments to Poultry Disease Laboratory, Department of Veterinary Medicine, Corvallis, Oregon.

16. Shipping facilities should be checked beforehand so that samples will arrive at Corvallis within 48 hours from time drawn, and none should arrive on Saturday or Sunday.

17. The testing charge is 3 cents per sample, with a minimum charge of $1.00 for 33 samples or less. **Reports will not be sent out until payment is received.** Make checks, money orders, or drafts payable to O.S.C. Department of Veterinary Medicine.