

**UNIVERSITY OF DELAWARE
OFFICE OF LABORATORY ANIMAL MEDICINE**

Survival Bleeding Volumes SOP #PRO-001

The information below is to be used in determining the amount of blood that can safely be taken from an animal.

- 10% of the total blood volume can safely be removed every 14 days.
- Total blood volume is approximately 6% of body weight.
Example: 30g mouse = 0.03kg x 0.06 = 1.8ml x 0.10 = 0.18ml (180µl)

**Maximum TOTAL* Blood Volume that can be Removed
From an Animal Over a 14-Day Period**

*total volume from one draw or the sum of multiple draws.

Body weight (g)	µl	ml
15	90	0.09
20	120	0.12
25	150	0.15
30	180	0.18
35	210	0.21
40	240	0.24
45	270	0.27
50	300	0.30
150	900	0.90
200	1200	1.2
250	1500	1.5
300	1800	1.8
350	2100	2.1
1000	6000	6.0

ALL animals must be observed after blood draws for signs of pain or distress.

Note: Blood draw volumes greater than 10% over a 14-day period must be justified in the protocol and be approved by the IACUC. Appropriate parenteral fluid replacement should also be administered.