

From Julie Levy, DVM, Diplomate ACVIM; Maddie's® Professor of Shelter Medicine; Director, Maddie's® Shelter Medicine Program at University of Florida

"I have worked with several vet student groups who raised hundreds of orphaned kittens. We had the luxury of a vet school environment so we could provide intensive support and we necropsied all the animals that died.

What we found in kittens was that the most common cause of death in the 2-5 week age range was sepsis. This frequently affected entire litters who faded and died within hours of each other or over several days. Once they started to fade, intensive care did not help. Therefore, we started using prophylactic antibiotics on remaining littermates when the first one died. I use injectable only to assure good absorption, Baytril 5 mg/kg SC once daily and ampicillin 22 mg/kg SC TID. We also support with SC fluids, feeding tubes (NG tubes are easy in newborn kittens), and passive blood products as needed. We also have documented inadequate passive transfer of immunity in many of these kittens, which may be the underlying cause of the sepsis (just like in food animals).

This experience led to a series of studies on antibiotic pharmacokinetics in kittens and correction of FPT [*] by using serum from immune adult cats. We now know that you can provide kittens with a normal level of passive immunity by giving them 15 ml of cat serum (5 ml SC BID x 3 doses), and we use this a lot. It is also very important for the foster families to weigh kittens daily to catch the earliest signs of problems when intervention is more likely to be successful. Kittens should gain weight each day. We have a 90% survival rate with this approach, which is admittedly pretty intensive and won't be practical for a lot of facilities. My bottom line recommendations are: weigh daily, assure adequate nutrition, give serum if there is any concern about FPT (or just give it to all young orphans), and use antibiotics when litters start to fade. Also, do everything possible to keep them out of the shelter. Even if they are there for just a few hours they are likely to be exposed to URI."



^{*} Failure of Passive Transfer