Vaccines for the Beef Herd Mixdown 1_predescript

Dana Zook: [00:00:00] Welcome back to the extension experience podcast. I'm Dana Zook. We are on the Oklahoma state campus in the college of veterinary medicine. I am joined today by Dr. Rosslyn Biggs, OSU beef cattle extension specialist and director of continuing education for the vet school. Dr. Biggs, welcome.

Dr. Rosslyn Biggs: Thanks for having me.

Dana Zook: Dr. Biggs this week. I thought we would have a timely discussion about vaccinations for the cowherd. We're going to jump right in. If we were talking generally about a vaccine, why is it important to have this tool in our toolbox for our beef operation?

Dr. Rosslyn Biggs: Right, so vaccines are really going to be used as preventatives.

It's important to note they are not a hundred percent, a hundred percent of the time, but they give us a leg up on infectious disease in particular for bovine respiratory disease that can be really impactful across the entire beef supply chain.

Dana Zook: So, in Oklahoma, we have probably several mainstream vaccinations that we would recommend.

[00:01:00] However, I assume that you would say,

Dr. Rosslyn Biggs: Yeah, as I always do, Yeah. This is, this discussion is not cookie cutter. Right. Right, people ask on a regular basis, like, well, just give me the list. And, it is highly dependent upon your operation, The specifics of your operation, your geographic area, and no one knows better than that than your local veterinarian.

And making sure you have a conversation with that individual can be, You, you want to do that in advance, right? Not when you show up saying, Hey, doc, I need some, I need some vaccine. I'm going to go work the cows tomorrow. Do that in advance is my, is my general recommendation for that, but it is highly variable depending upon the operation.

But when it gets to it, I have some , main categories. We want to be thinking about our clostridial vaccines commonly folks would call that Blackleg that may or may not [00:02:00] include tetanus based on the needs again of your herd, be operation specific. And then we would have a group of vaccinations that would be highly focused on respiratory viruses.

Those would be another category that I want to make sure I've got coverage there. And then you may or may not need some options. with reproductive control, things like Lepto or Vibrio or others as recommended based on the risk of your herd too.

Dana Zook: And it would vary across the state, you know, where you're located and that sort of thing.

So if we talk about vaccinations, in my opinion, we are planning for the future.

Dr. Rosslyn Biggs: Absolutely.

Dana Zook: And so what does this vaccine, regardless of what you give I mean, I guess it might depend on what you get, but how does this impact the health of our future calves?

Dr. Rosslyn Biggs: Right. So, there, there are benefits for the cow or the heifer herself, right, particularly on our [00:03:00] heifers.

But as we look at what the value is for the long term, we really want to think about that calf because , that mother cow is going to, based on her immune status. Hopefully, dump all the good stuff into her colostrum and that is the initial start. It's the, it's the initial coverage for that calf at birth and then for a certain period of time afterwards.

Dana Zook: So we would say cows with a, good health status would be providing a higher quality colostrum, helping those calves along and there is some research to say, and we'll probably have to talk about this in a future episode , that initial calf health from the cow impacts health into the feed yard.

Dr. Rosslyn Biggs: Absolutely. That's a whole, yeah, we need a whole other session for, for that when it comes to fetal programming and then how, how the calf impacts the longterm. like really lifelong health of that calf whether that calf [00:04:00] is going to go back into reproductive aspect of the beef industry or whether that is going to go towards feeding, that, that cow health is critical and, and vaccinations are part of that.

Dana Zook: Right, right. Does the timing of vaccination make a difference?

Dr. Rosslyn Biggs: Absolutely. We, of course, want to read the labels and there's some variability based on if we're using modified live or killed vaccines and That's probably another episode to Dana, but at a minimum, I don't want to vaccinate, you know, any earlier than 45 days before, before breeding.

, Now I, I recognize that, you know, if you're like my dad, , You work stock on holidays and when, when you've got everybody there to do it. So the labor piece of it, but again, that's another consideration you need to discuss with your veterinarian because you may choose one product over another.

And so you know, in general, we want to have those [00:05:00] replacement heifers. We want to have them full and ready to go. We want to develop them. You know, we want them. Ideally vaccinated at branding time, then we want them vaccinated before weaning. And then I'm usually going to put another set of vaccinations in them, but no, no later than 45 days before I'm going to go breeding.

Because there can be some impacts reproductively subtly on, on their ability to conceive if they have inflammation that's remaining from a vaccination.

Dana Zook: Right. So, that is a good conversation to have with your vet.

Dr. Rosslyn Biggs: And, you know, and I also note that, depending upon the cow herd You know, you can also give the argument the closer to calving, usually, you know, 30 days before if I vaccinate that cow, depending upon the product, again, that's most appropriate, that may, that may impact colostrum.

And so, there are, there are some timing things that are important. The biggest thing is, we want to use the appropriate product and we want to get it in the cow so that it [00:06:00] positively impacts our calf. And there's some variables to that.

Dana Zook: Right, and so you'll see products for pink eye or for scours and some of these not as traditional type vaccines and so those are out there

Dr. Rosslyn Biggs: They're out there and and they are appropriate in some circumstances and it it is highly herd dependent on what is is going on in your history.

I mean There are some herds where the scours vaccine is it is a must Right? But we also want to think about, particularly with some of those diseases, our management and using vaccines. Vaccines are not a, are not the silver bullet. They are not the magic, magic wand to fix all health problems that we have.

And so we need to make sure that they are a part of our health program and not our sole focus , in our herd health program.

Dana Zook: Excellent point. That's great. So, if we're talking about vaccines, I think, I would be remiss if I didn't ask you if there's an [00:07:00] importance to handling these vaccines appropriately.

You just know that's my favorite topic. Yes, I do know. Yeah, yeah. Yeah, isn't the title of your you have a title of your It's like Ready, Set, Vaccinate. Yeah, something like that. That is

Dr. Rosslyn Biggs: my, I love this topic because I think There are lots of ways to do it wrong. And so we want to think about how we handle these vaccines from the time of purchase, where we purchase them, making sure that they're from a reliable source, and that we're caring for them until the point we get them , in our animals.

We want to make sure, , we're not in the summer in Oklahoma that they didn't set out on the receiving dock for two or three days in the 100 degree temperatures. If they're not maintained between 35 to 45 degrees, they're not something I want to use. The opposite of, you know, they got nuked in the sun is if they freeze.

You, you've wasted your money and, and that's the important thing. We want to care for these. It's kind of like [00:08:00] Goldilocks, like not too cold, not too hot. We want to just keep them just right. And so we also want to make sure that if we're keeping them at home in the refrigerator, that that refrigerator is making sure that it's, staying within that 35 to 45 degrees.

You want to keep them cool on site at processing. We want to be using those modified lives really within 60 to 90 minutes. I like 60 more cause I'm I'm cautious. But from the time we mix those, we want to get them into the cattle. And so those are some considerations that become important.

Dana Zook: Yeah. Buying them from a reputable source is important that you trust because you, as, as a consumer of vaccines, you may not know whether

they froze or got too hot. I mean, they look the same, , to our human eye. That to me is, managing some risk.

Dr. Rosslyn Biggs: There's lots of different options out there.

you want to have that discussion. There are some veterinarians that have vaccines available for purchase, others that's not their primary, you know, that's not their [00:09:00] primary focus. And so they may direct you in other ways, but buying from a reputable source , makes the most sense.

Dana Zook: Right. So keeping, it cool. We have a great vaccine cooler how-to.

Dr. Rosslyn Biggs: Check out that OSU fact sheet. That's a great one. And, you know, goodness, I probably have two or three of those little coolers , in my garage because my husband's real big into the fancy coolers. Oh, okay. Yeah. So those have, those are old, but they make great vaccine coolers and it's really easy to do to, to get those.

So check out that fact sheet for sure.

Dana Zook: Absolutely. Vaccine considerations will vary from one operation to the next. And I know you would agree. that this is a conversation, like we said, to have with your vet. How would you suggest that producers breach the topic with their veterinarian?

And it may be that they didn't know that some of these things should happen. What is your advice?

Dr. Rosslyn Biggs: We get a lot of questions and I do, as I'm fortunate enough to talk to producers across the state, some people that are brand new to the beef industry Goodness, we want you. Yes. [00:10:00] Right? Like, come on, , be a part of the fun.

And then we have producers that have , they've done it for generations. But someone sometimes has to ask, are we still doing it the right way? So I think those are questions that you can pose to your veterinarian. I like, you know, scheduling a time with your veterinarian and , pay for an hour of consulting discussion.

Maybe it's only 30 minutes. Maybe it's only 15 minutes with your veterinarian and say, I want to sit down. These are the goals of my operation. I want to talk about my vaccination plan. I want to talk about common issues I see within my

herd so we can have treatment plans because again, Cattle don't get sick at Tuesday afternoon at one o'clock, right?

Like, it's always on the weekends or at night or if you're like me, you know, you, you're not finding them until well after traditional hours. And so, if we can have these discussions in advance, we've got a plan, we can make a lot of things happen before we have issues. And, and the vaccination plan, it needs to be [00:11:00] revisited at least annually and talk about how, you know.

Did you see issues after, after the vaccination? Or if you're the producer that is maintaining these cattle, let's say you're maintaining your calves all the way through the feedlot phase, did we see the health outcomes that we anticipated? And so records become important and we need to think about maintaining those and then sitting down with our veterinarian to take a look at, at what the options may be moving forward.

Dana Zook: Yeah, it's a conversation that I think every vet is really happy to have.

Dr. Rosslyn Biggs: Absolutely, and it's not at two in the morning. Right, right. I would much rather sit down with you well in advance and try to prevent a problem than try to, you know, fix the problem once we're in a train wreck.

I mean, having those conversations in advance and, and don't forget, I mean most of our, most of our veterinary practices are small town businesses, just like those on Main Street. making sure that we are supporting them in, in [00:12:00] great ways. My goal as your veterinarian is. ideally to save you money because I want to make, I want to make your cattle healthier, right?

We may have to come up with some plans that are a little more expensive up front, but ultimately long term health is, is benefit and it'll save you dollars.

Dana Zook: Yeah. You're supporting your vet and supporting your ranch or operation all in the same type of thing.

Dr. Rosslyn Biggs: Absolutely. Mutually beneficial relationship right there.

Dana Zook: Dr. Biggs, excellent information. As we wrap up, could you list A couple of basic benefits of vaccine as we just Yeah,

Dr. Rosslyn Biggs: I think from the cow herd perspective, we're, we're protecting the individual, like we're protecting that cow or heifer because we

want her to be strong and not have to deal with illness in a really stressful period of time, which is pregnancy not stress free in pregnancy.

If, if producers out there have never been pregnant, I can guarantee it is full of lots of challenges. Yes. Number two, though, we are, are thinking about the health of that calf. , long term [00:13:00] from the time that that calf is born. We want them up and thriving. We want that colostrum vaccines have positive impacts on what's contained in colostrum.

And we want that calf thriving. Those are the two big ones. And then I just wrap it up in general with vaccines. We're there. They're there to hopefully they're not a hundred percent, a hundred percent of the time as we started out with, but we want to try to prevent disease as much as we possibly can.

And that ultimately leads to positive animal health and positive welfare.

Dana Zook: There's lots of benefits out there, Dr. Baker. So thank you so much for joining me.

Dr. Rosslyn Biggs: Thanks for having me.

Dana Zook: Good direct conversation. I think about this topic. So listeners look for some more information in the show notes.

Thanks for tuning in and have a great week.