

SAFETY SUMMIT SUMMARY– DAY 1

Section 1: Wednesday, April 20th, morning sessions (8:00am – Noon)

We all plan for that day we hope will never come: a potentially deadly animal escapes, or a person unintentionally enters their space. We regularly prepare our firearms teams for this, but are there other options?

When animals escape - Adding more tools to the tool box

In this session you will learn about less than lethal response options when responding to incidents involving potentially deadly animals as well as ultra-potent opioid use and safety that are important tools when responding to animal escapes and other animal related emergencies.

Firearms 201 – Strategies to help your team be ready if that day comes

"Under Pressure, we don't rise to the occasion - we sink to the level of our training" (quote from Navy Seals). In this session you will hear a recap of Firearms 101 and then panelists will cover a variety of strategies to take your training beyond your firearms team and take your firearms training program to a higher level through topics including advantages of an outside trainer, post training de-briefs, taking training beyond the firearms team, and strategies to conduct successful functional training exercises(drills).

Making Tabletop drills useful and fun!

This will be an interactive session where you may get to play a Table Top Drill Dice Game, and you will come away with the tools and templates that you need to start using this invaluable training tool at your zoo or aquarium!

Section 2: Wednesday, April 20th, afternoon sessions (1:00pm – 5:00pm)

Disasters and crisis come in many forms, sometimes you have time to plan, sometimes you don't. This session help you identify some resources that are available before, during, and after what may come your way.

Get Ready, Get Set, Respond - Tools and relationships for before, during, and after a crisis or disaster

Panelists in this session will discuss relationships to build for different types of disasters and crisis before they occur, contingency planning and crisis communications, tools for animal emergencies, and resources available after the crisis when you transition to recovery of your physical facilities and the mental wellness of those that care for your zoo or aquarium.

Merging heavy rescue techniques into your facility Emergency Action Plan

Heavy rescue brings a whole new level of situational awareness to planning and response. While most exotic animal interactions are hands-off; lifting or moving your mega-vertebrates requires extensive planning with multiple departments and teams. This unified command works together to beat the clock in the animal's best interest whether it be a scheduled procedure or an emergency situation. Animal Search and Rescue (ASAR) Exotic Animal Strike Team instructors will provide a presentation to review case studies and lessons learned to help safety officers and facility leadership identify all of the players needed in these scenarios. You never think you will need to lift an elephant until you do. Don't wait to plan for it.

Practical Incident Command Strategies (ICS) for Zoos and Aquariums

The ICS is the common language used during a disaster or crisis. Whether you are a large or smaller facility, learn how to apply ICS to navigate a crisis. Panelists will talk about success stories as well as the challenges of ICS and provide a better understanding of how it works in an actual emergency.

SAFETY SUMMIT SUMMARY – DAY 2

Section 3: Thursday, April 21st, morning sessions (8:00am – Noon)

Day two kicks off with a mixed bag of safety topics covering safety around water bodies, assessing risks around our most dangerous animals, and a study of safety and security around avian diseases.

Hot topics in aquarium and dive safety

Dive safety is an ever-evolving industry with regulatory requirements, hazard control strategies for guests/contractors/ VIPs, OSHA regulations, AZA accreditation standards, other consensus standards, rescue equipment, Emergency Action Plans, risk assessments, permits to work around water. Learn the current hot topics in aquarium and dive safety.

Assessing Risk around PDA's

In the world of safety, risk assessments of hazards are a common practice. In our profession, our hazards think, move, and have personalities. That creates a whole new challenge for assessing risks. In this session, learn about some risk assessment tools and hear stories from some facilities that have a successful risk assessment program, and take home some tools that may work for you.

Zoo and Aquarium All Hazards Partnership (ZAHP) Update on Safety and Security around Avian Diseases

ZAHP recently conducted a pilot survey on Safety and Security around Avian Diseases. These pilot results suggest that most of us have not committed to a proactive approach in preparing for when, not if, the next disease appears to threaten our collections.

Changing the way we think about errors: Just Culture

Mistakes happen. How we learn from near misses, mistakes, errors, and accidents can be the best tool we have to make our institutions safer. In this session you will learn about a concept called “Just Culture” that could help you uncover the source of errors and create an atmosphere of trust that encourages and rewards people for providing essential safety-related information.

Section 4: Thursday, April 21st, afternoon sessions (1:00pm – 5:00pm)

The summit wraps up with an afternoon that focuses on tools and lessons learned with the focus on prevention of the most serious and high profile things that can go wrong in our facilities and some tools for building a safety culture at your zoo or aquarium.

Preventing Tragedies - Safety tools and strategies around Potentially Deadly Animals (PDA's)

Risk is inherent in the care of our most dangerous animals. Our jobs are to find ways to mitigate risk and to minimize the chance for mistakes and human error that can lead to tragedy. In this session you will hear from a cross section of experts in our profession on topics including a keeper's role in safety, engineering controls around PDA's, building safety into a new exhibit, and how to keep safety fresh!

The “Danger Zone” – Tools and Strategies for Managing the Space between Animals and Guests

Guests defeating barriers is becoming an all too common occurrence. Learn how to manage this “danger zone” with discussions of successes and challenges that our facilities are experiencing. The panelists will also cover safety training, technology solutions, other strategies, and what happens after an injury.

SAFETY SUMMIT DETAILED AGENDA – DAY 1
MORNING SESSIONS

Presentation Time		Presentation Topic	Presentation Description	Presenter(s)
Start	End	Day 1	(Wednesday, April 20) Morning Sessions	
8:00 AM	8:10 AM	Welcome and opening statements		Jeff Halter/Dave Ruhl, Cheyenne Mountain Zoo
8:10 AM	8:15am	When animals escape Adding more tools to the tool box	We all plan for that day we hope will never come when a potentially deadly animal escapes, or a person unintentionally ends up in with them. We practice our firearms team responses, but there are other tools in the tool box for these situations. In this session you will learn from several panels and presenters about less lethal response options, ultra potent opioid use and safety, and some ways to take your firearms team to the next level. The session will wrap up with an interactive tabletop exercise that will leave you with tools you can take back home to your facility.	Jeff Halter, Cheyenne Mountain Zoo
8:15 AM	8:35 AM	Ultra Potent Opioid Use and Safety in Zoological Institutions	Anesthesia is a balancing act. Too much of one kind of medication and the patient may not wake up, but too little and it may wake up too early! Anesthesia in zoological species is even more complicated because different species react differently to each kind of anesthetic medication. Ultra-potent opiates such as etorphine and thiafentanil are especially useful for anesthetizing rhinos, elephants, and gazelle, but if accidentally administered to primates (like humans) they can cause narcosis, stop breathing, and lead to death if not treated. This presentation will review how these medications work, how to prepare the whole team for using them, and what to do in case of an accidental exposure of a human.	Meredith Clancy, DVM San Diego Zoo Wildlife Alliance
8:35 AM	8:55 AM	Less Lethal Response	In 2020 Utah's Hogle Zoo set up a program to have a Less Lethal response option available for our Emergency Response Team (ERT) in the event of an incident with a PDA. This gives us the ability to potentially resolve a situation without the use of lethal force. Surprisingly enough, depending on the size of your team, this can be set up for less than \$2000. We will discuss how we tested different types of ammo, picked a firearm to use, and trained staff on a LL response.	Jeff Landry, Utah's Hogle Zoo
8:55 AM	9:15 AM	Moderated Q&A		Jeff Halter, CMZ
9:15 AM	9:30 AM	BREAK/NETWORKING TIME		
9:30 AM	9:40 AM	Firearms 201: Taking your training beyond the trigger press	Being prepared for any emergency takes on a whole new meaning when working with potentially deadly animals. The zoo and aquarium industry is one of only a few that requires preparing for the use of firearms in a public space. Firearms 201 builds on what was learned in the Firearms 101 webinar to take your response beyond the trigger press.	Tim Sampson, John Ball Zoo
9:40 AM	10:25 AM	Firearms 201 Panel Presentation	Firearms 201 panelists will cover: <ul style="list-style-type: none"> • The benefits of having an outside trainer what and to look for in an outside trainer. • Taking your training beyond the trigger press by incorporating the concept of covering the target after, immediate triage and first aid, the importance of stop the bleed training, etc. • The importance of having your PR team be included in the training, your vet team? Your incident commanders, etc. • Incorporating recall training into your functional exercises and planning and learning from a fire arms training exercise using a "Mulligan Drill" 	Erin McNally, LVT Wildlife Aquatic Zoo Relief/GRAZE Zach Marchetti, Brevard Zoo RoxAnna Breitigan, The Living Desert
10:20 AM	10:45 AM	Moderated Q&A		Tim Sampson, John Ball Zoo
10:45 AM	11:00 AM	BREAK/NETWORKING TIME		
11:00 AM	12:00 PM	Table Top Drill Demonstration - Interactive	During this session, we will present a table top exercise dice game that covers all the basic required AZA drills that can be used as a tool to help you and your team prepare for your next live action drill. We will run a group of audience participants through a drill or two so you can see how the game works and what you can learn. With this tabletop dice game, that you can take back to your zoo or aquarium, you will get a different outcome at every drill.	Kelly Murphy, North Carolina Zoo
12:00 PM	1:00 PM	Lunch 12-1PM	Lunch	



SAFETY SUMMIT DETAILED AGENDA – DAY 1
AFTERNOON SESSIONS

Presentation Time		Presentation Topic	Presentation Description	Presenter(s)
		Day 1	(Wednesday, April 20) Afternoon Sessions	
1:00 PM	1:05 PM	Get Ready, Get Set, Respond - Tools and relationships for before, during, and after a crisis or disaster	Disasters and crisis come in many forms, sometimes you have time to plan, sometimes you don't. This session help you identify some resources that are available before, during, and after what may come your way. Panelists will discuss relationships to build for different types of disasters and crisis before they occur, tools for animal emergencies, and resources available after the crisis when you transition to recovery of your facility and those that care for it.	Kelly Murphy, North Carolina Zoo
1:05 PM	1:25 PM	Contingency planning, crisis communications and relationship building from a PR Perspective	What contingency planning is required by various agencies, what is on the horizon, and what should you be doing? Have you thought of crisis communications and agency relationships before a crisis occurs? Industry leaders will share information and stories that will help answer these questions.	Erin McNally, LVT Wildlife Aquatic Zoo Relief/GRAZE Julia Wagner, ZDR3
1:25 PM	1:45 PM	Roles and Responsibilities During Technical or Heavy Rescue Animal Procedures	Heavy rescue brings a whole new level of situational awareness to planning and response. While most exotic animal interactions are hands-off; lifting or moving your mega-vertebrates requires extensive planning with multiple departments and teams. This unified command works together to beat the clock in the animal's best interest whether it be a scheduled procedure or an emergency situation. Animal Search and Rescue (ASAR) Exotic Animal Strike Team instructors will provide a presentation to review case studies and lessons learned to help safety officers and facility leadership identify all of the players needed in these scenarios. You never think you will need to lift an elephant until you do. Don't wait to plan for it.	Eric Thompson, ASAR Training and Response
1:45 PM	2:05 PM	What should happen before disaster strikes?	Natural disasters and abnormal weather events continue to intensify and increase in frequency. Who can you call if it strikes your facility? What is the timeline to prepare? What resources are available? The director of ZDR3 (Zoological Disaster Response, Rescue, and Recovery) will answer these questions and share what ZDR3 is and where the idea came from.	Julia Wagner, ZDR3
2:05 PM	2:25 PM	Mental wellness during recovery and beyond, resources, Group of facilities to respond post crisis, help other institutions	Words like resiliency and mental wellness have become increasingly popular in the vocabulary of many, but what do these really mean when it comes crisis recovery? The crisis response plan should take into consideration the Five T's when it comes to crisis intervention. In this session you will learn what the Five T's are and how to use them to guide you in your response to a crisis. Having a relationship with the right resources ahead of time can improve the mental wellbeing of the staff before, during, and after a critical event.	Erin McNally, LVT Wildlife Aquatic Zoo Relief/GRAZE
2:25 PM	2:45 PM	Moderated Q&A		Kelly Murphy, North Carolina Zoo
2:45 PM	3:00 PM	BREAK/NETWORKING TIME		
3:00 PM	3:05 PM	Practical Incident Command Strategies for Zoos and Aquariums	Should disaster strike whether you are a large or smaller facility – know how to apply and navigate through the Incident Command System (ICS). Panelists will talk about success stories as well as the challenges of ICS. Incident Command is more than just training, it's understanding how it works in an actual emergency.	Ken Frye, Scovill Zoo
3:05 PM	3:25 PM	What is ICS, Why its important, and Zoo and Aquarium Statistics	Incident Command is the first responder's lingo – do you know how to speak that language??? Should disaster strike whether you are a large or smaller facility – know how to apply and navigate through the Incident Command System (ICS). Incident Command is more than just training, it's understanding how it works in an actual emergency.	Rick Holzworth, Jacksonville Zoo & Gardens
3:25 PM	4:05 PM	Incident Command Success Stories	Hear stories from panelists from a variety of sizes and types of institutions about times when having an incident command system in place helped them navigate a real life event such as a weather disaster. Learn what went well, what they learned, and what you could learn from them that could be applied to your response team at your zoo or aquarium.	Jeff Halter, CMZ Ken Frye, Scovill Zoo Sarah Perry, Detroit Zoo
4:05 PM	4:15 PM	"Boots on the Ground"- How it really works in a crisis	Implementing the Incident Command System (ICS) at zoo and aquarium facilities is a critical component for successful response and recovery to adverse events. In order to avoid unintended adverse consequences with using ICS, it is important that those engaged with the Command structure understand the scope of implications associated with its use, and consider strategies for proactively addressing areas of potential concern	Julia Wagner, ZDR3
4:15 PM	4:45 PM	Moderated Q&A		Rick Holzworth, JZG
4:45 PM	4:50 PM	DAY 1 WRAP UP		Jeff Halter, CMZ



SAFETY SUMMIT DETAILED AGENDA – DAY 2
MORNING SESSIONS

Presentation Time		Presentation Topic	Presentation Description	Presenter(s)
		Day 2	(Thursday, April 21) Morning Sessions	
8:00 AM	8:15 AM	Welcome and opening statements	Intro to a "Mixed Bag" of Safety Stuff	Jeff Halter/Dave Ruhl, Cheyenne Mountain Zoo
8:15 AM	9:15 AM	Aquarium/Dive Topics	Dive safety is an ever-evolving industry with regulatory requirements, hazard control strategies for guests/contractors/ VIPs, OSHA regulations, AZA accreditation standards, other consensus standards, rescue equipment, Emergency Action Plans, risk assessments, permits to work around water. Learn the current hot topics in aquarium and dive safety.	Nate Fague, Mystic Aquarium Tim Sampson, John Ball Zoo
9:15 AM	9:30 AM	Moderated Q&A		
9:30 AM	9:45 AM	BREAK/NETWORKING TIME		
9:45 AM	10:30 AM	Dangerous Animal Area Risk Assessment Tools and Strategies	This should be an overview of what the subcommittee is working on as well as a couple panelists that have a successful risk assessment template	Maria Gallegos, Houston Zoo
10:30 AM	11:00 AM	ZAHP Update on Safety Security around Avian Diseases	ZAHP (Zoo All Hazards Partnership) staff will review current information on safety/security around avian diseases and other emerging topics	ZAHP Staff
11:00 AM	11:45 AM	Just Culture in Zoos and Aquariums	Mistakes happen. How we learn from near misses, mistakes, errors, and accidents can be the best tool we have to make our institutions safer. In this session you will learn about a concept called "Just Culture" that could help you uncover the source of errors and create an atmosphere of trust that encourages and rewards people for providing essential safety-related information.	Hollie Colahan, Birmingham Zoo
11:45 AM	12:00 PM	Moderated Q&A		Jeff Halter, Cheyenne Mountain Zoo
12:00 PM	1:00 PM	Lunch 12-1PM	Lunch	

SAFETY SUMMIT DETAILED AGENDA – DAY 2
AFTERNOON SESSIONS

Presentation Time		Presentation Topic	Presentation Description	Presenter(s)	
		Day 2	(Thursday, April 21) Afternoon Sessions		
1:00 PM	1:05 PM	Preventing Tragedies - Safety taround Potentially Deadly Animals (PDA's)	Risk is inherent in the care of our most dangerous animals. In this session you will here from a cross section of experts in our profession on topics including a keepers role in safety, engineering controls around PDA's, building safety into a new exhibit, and how to keep it fresh!	Jeff Halter, Cheyenne Mountain Zoo	
1:05 PM	1:20 PM	A Keepers Role In safety	Everyone is responsible for their own safety. As an animal care professional taking care potentially deadly animals, the role expands beyond your own safety to the safety of the animals in your care and the guests that come to learn about them.	Kathryn Juliano, Smithsonian's National Zoological Park	
1:20 PM	1:30 PM	2 Key 2 lock system, what, why, and where we are	The 2 key 2 lock system was first presented at the Safety Summit in 2017. This session will cover what has happend since then, progress on the example practice, as well as a brief overview of what it is, and why it is important to keep the conversation going.	Dave Ruhl, Cheyenne Mountian Zoo	
1:30 PM	1:45 PM	Building safety into new PDA facilities	Learn from Lincoln Park Zoo their process of making safety a priority and part of the conversation during the design of their new Lion exhibit that includes the 2 key 2 lock system as well as other safety strategies.	Mike Murray, Lincoln Park Zoo	
1:45 PM	2:40 PM	2 Key 2 Lock Town Hall Meeting	In this townhall style meeting, a panel of animal care professionals from a variety of roles that have experience using the 2 key 2 lock system at a variety of institutions will talk about their firsthand experience with this important engineering control. You will hear their "why" and what works well and any kinks they have experienced. They will bust some myths, and answer questions from the moderator and the audience in the continuing effort to "make our safe zoo's safer". Bring your questions and be prepared to have them answered by this talented panel of professionals. Panelists; Amy Schilz (Cheyenne Mountain Zoo), Kate Budion (Turtleback Zoo, Laura Weiner (Henry Vilas Zoo), Tim Sampson (John Ball Zoo), Mark Schneider (Akron Zoo), Erin McNally (Wildlife Aquatic Zoo Relief)	Moderator: Jeff Halter, Cheyenne Moutnain Zoo	
2:40 PM	3:00 PM	BREAK/NETWORKING TIME			
3:00 PM	3:40 PM	Zoological Park Vulnerability Assessments for Grant Funding and Department of Homeland Security (DHS) Funded Training Courses.	The San Diego Zoo Wildlife Association (SDZWA) will share their experience and best practices for using Vulnerability Assessments for Grant Funding and Department of Homeland Security (DHS) Funded Training Courses. The SDZWA has established collaborative and mutually beneficial relationships with local, state, tribal and federal public safety agencies to enhance security and safety.	Tyler Burtis, San Diego Zoo Safari Park	
3:40 PM	3:55PM	"The Danger Zone"	That space between animal barriers and guest barriers is THE DANGER ZONE. . . To zoo and aquarium professionals, it seems like common sense to not cross the barriers into "the danger zone". The Safety summit will close out with discussions of successes and challenges that our facilities are experiencing in this space that keeps our animals and the people that visit them and care for them safe. Learn some history of the trend, some of the "why's", what role we play, and what we can do about it. The panelists will cover safety training, techonology solutions, other strategies, and what happens after an injury.	Tim Sampson, John Ball Zoo	
3:55 PM	4:05 PM	Contractor/Vendor Safety Orietnation	When you have contractors or vendors working on site, do they know the "Zoo and aquarium" specific safety rules for your institution? If not, they could unknowingly put themselves or the animals in your care at risk. Hear how a quick "tool box talk" can educate our contractors/vendors and protect our instutions.	Dave Ruhl, Cheyenne Mountain Zoo	
4:05 PM	4:30 PM	Techology Solutions	Learn from several facilities about some of the emerging technology that is out there to help us combat this trend, improve safety, help us know what happend when things go wrong (or right). Also hear the stories and the roadmap for how they arrived at their solutions	Maria Gallegos, HZ Rick Holzworth, JZG Tim Sampson, JBZ	
4:30 PM	4:40 PM	What happens after a guest injury	What happens when you have the barriers in place, you have the signage, you've done your best to mitigate risks, and a guest crosses a barrier and gets injured. Hear what happened, what happens next, and how you can be ready to react if it happens to you.	Rick Holzworth, Jacksonville Zoo & Gardens	
4:40 PM	4:55 PM	Moderated Q&A		Tim Sampson, JBZ	
4:55 AM	5:00 PM	SAFETY SUMMIT WRAP UP			Dave Ruhl, CMZ

