

Appendix A

Observations

OBSERVATIONS

Tom Harrison, Program Director



A family of three arrived. The family included a 12 year old girl. Her expression made it clear she was there only because of her younger brother. Nonetheless, I showed off the loaner blasters. She warmed up a little. She took in her surroundings-- the pop-up tents arranged around the gym floor, the people picking up darts with dust mops.

She said, "I'm the only girl here."

I told her there were other girl players, including girls her age.

He face lit up" There are other girls here?!"

Later, she was back at the first floor lobby. I happened to be there. I saw her lock eyes with Dismas, who owns This Coffee Life and was operating his coffee pop-up booth for attendees. I thought she was just taking note of her surroundings again. Then she walked closer.

"What are you doing here?!" she asked him excitedly.

Dismas responded and the 2 of them chatted. Later, I learned that she recognized him from his volunteer work with Casino Road Kids Ministries. After that, it seemed like you couldn't pull her off the play map.

A family of five arrived. The two parents, twin brothers and older sister signed up through Village on Casino Road. After check-in, I walked the children through safety rules and helped them select appropriate blasters. Within 10 minutes, they were on the play map, playing with a group of 50 players. After the round, the sons bounded up to the father and asked in unison, "Can you play?"

He glanced at me to see if it was okay. I beamed and encouraged him. He smiled and said yes.

For the next round, they were all on the same team. The father looked like their champion and squad leader on the field, holding 2 blasters and charging into battle. They were all smiles.



Appendix B

Full Testimonials

Roman Porter, Age 40



Playing Nerf at the Everett Mall has been an incredibly rewarding and enjoyable experience for me, my son, family, and friends. What started as a fun weekend activity has turned into a recurring meaningful part of our lives.

As a father, I'm always looking for ways to spend quality time with my son that are both active and engaging. Nerf at the Everett Mall offers the perfect setting. From the moment we stepped into the arena, we felt welcomed. The environment is safe, well-organized, accepting and filled with positive energy. The organizers and support staff are friendly and professional, making sure everyone follows the rules while still having a blast. Every game offers an opportunity for us to work together as a team, strategize, and cheer each other on—something that strengthens our father-son bond in a way that few other activities do.

One of the standout aspects is the emphasis on sportsmanship. Players, young and old, are encouraged to play fair, show respect, and support each other. It's heartwarming to see kids helping one another up after a fall or high-fiving teammates and opponents alike after a good match. These small moments create a positive, uplifting atmosphere that sticks with you even after the game ends. Nerf at the Everett Mall also provides great physical activity. Running, dodging, and aiming are all part of the fun, and you get a solid workout without even realizing it. For kids, it's a healthy outlet for energy; for adults, it's a fun way to stay active and feel like a kid again.

Perhaps what I appreciate most is the diverse community that gathers here. You'll find people from all walks of life, different ages, backgrounds, and experiences, all brought together by a shared love of the game. It's amazing to see a 10-year-old teaming up with a college student or a parent playing alongside their child. Everyone is included, and the sense of camaraderie is real.

Overall, I can't say enough good things about the Nerf experience at the Everett Mall. It's a rare combination of fun, fitness, family bonding, and community connection all in one place. We always leave with smiles on our faces, new friends made, and great memories to talk about until the next time we play. I highly recommend it to anyone looking for an activity that's as positive as it is exhilarating.



They Tried to Tag His Family.
BIG MISTAKE!



Richard Chambliss, Age 49



I arrived at the Planet Mynd Mall Blaster Battle today to see these posters all over the event. I got into this hobby for my 12 year old son who has been into nerf for years. In the last 6 months, I have been able to introduce my son to most of the nerf content creators he idolizes, learned how to mod blasters, build them with hardware kits, and how to use a 3d printer. I can't tell you how cool he thought it was to see his dad on posters at a nerf event . . . This is a day that will go down as one of the best in recent memory. Seeing your son's excitement that his father is on a poster at an event . . . it was just the coolest!

The morning we were packing up for [the] January event, my son turned to me and said, "These are my favorite days." It was the best, seeing [my son] smile and excited for our special day.

I've been doing this for a few months. My son, he's 12, who's been into dart blasters and nerf for a really long time. And he kept on begging me to get a higher FPS dart blasters to play with him and his buddies. So I finally got one and he knew what he was doing because as soon as I got one and I tried to play with his buddies, it wasn't really good so that was kind of it. I wanted to get competitive so I got a better one. I tried to understand how to mod it and make it the best it could be and that's led to a 3D printer and building our own dart blasters and modding them. This is a perfect example [holding up a blaster]. This is a BK1-S from Zius and I've modded the barrel and used a body kit from XFoxGames.

My favorite thing about Nerf has honestly been the bonding with my son. We've had so many memories and we've built so many wonderful memories that are going to carry us for the rest of our lives that we're going to be able to talk about. And lots of inside jokes. I'm like his armorer so like a week before battles come I'm asking him 'What do you want to run?' And I'm starting to think about what I need to print for him and starting to think about time commitments to do that. It's been a whole experience with him.

I have never seen a community more accepting than the nerf community.



Tabitha Vanpevenage, Age 28

I play nerf because it's one of the few things (I have a physical health issue), so this isn't something that's super taxing on me. It gets me involved with other people as well. Nerf has probably one of the most welcoming communities that I've ever been in and it's nice having a place where you feel like you belong so that's why I play nerf.

Honestly, [my favorite part has] got to be the diversity with all of the blasters. There's people that'll run stock things, silly things. They'll make their own, they'll mod things, there's some really top tier kind of competitive stuff. It's amazing seeing what people create.

Well, my first experience with nerf was, honestly, with this church thing growing up. We did a hide and seek tag game with a blaster and I knew nothing about nerf. But that was my first time playing in a game and I enjoyed it. I never got to play it again because I was like 'I don't know how to get into that.' Then my friend Nick, who is here today, actually got me into the hobby when I first met him. So now I'm like fully into it and I get to go to a ton of different events and it's been wonderful.



Lance Alderson, Age 31

I got into Nerfing back in middle school. I got a blaster for Christmas and I was kinda hooked after that. I really found the nerf community in college in a game called HvZ, a week-long game of tag and it led me to where I am now.

I like seeing what everyone makes cause there's a lot of ingenuity in nerf. There's people designing blasters, there's people building their own blasters, there's people going to the hardware store assembling things. And seeing what they build is a lot of fun.





Andrew, Age 34

Nerf in general for a good part of a decade. I would say humans versus zombies was the avenue to get into nerf in general at least anything beyond 'Hey, let's plink with things in the yard' or something like that. So Humans versus Zombies, for those who are less aware, it's a game of tag with nerf blasters. Humans get the nerf blasters, zombies get to run around and tag the humans. Usually played on college campuses and that's how I was introduced to humans versus zombies by other college students who had talked about the game and eventually I managed to join in on one of them. And here I am now.

It doesn't hurt as much as like paintball or airsoft. The ammo is absolutely reusable to the point they eventually get stepped on enough times the foam just crushes. So the cost of it is a bit less it doesn't hurt as much, plus I get to wear colorful gear now, which is quite different from airsoft, which typically they're playing war in like camo woodland-looking stuff and black and tan only. More colors.





Russell Verduzco, Age 22

So what got me into nerf was Youtube videos from nerfomania (who doesn't make content anymore), someone named Bobololo (who hasn't made content in years), and they inspired me to start building things on my own. They definitely sparked a lot of the creativity that I had going forward. It's been a long time since I've been in the hobby, so I've gotten the chance to watch it grow and change over the years. It's completely different to how it was when I started.

My favorite thing about nerf I would say is the social aspect. I mean I enjoy playing. I've always loved, really loved like having a team of friends that I play with. When I go to games I go to play with my friend group, not specifically to play the game. I go to play either against my friends or with my friends. It's been a long time of making new friends, seeing people come and go.

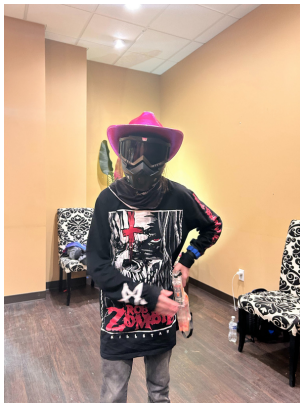


Fox, Age 21



I've been playing nerf since 6th grade, so a decade at this point.

I grew up doing a ton of modifying blasters and making them more powerful, making them smoother that sort of thing and more recently I've gotten into the game side of it a lot more. I really enjoy hanging out with friends and bringing together the technical side of the hobby with a fun play field and a ton of awesome people.



Cary, Age 12

My mom like signed me up, like got me a ticket for it because it's fun I guess. Me and my brother went to the last one and we found it fun. That's where I got this hat.

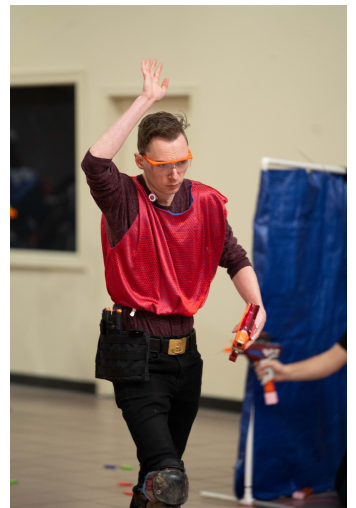
This is my second time.

[My favorite thing about nerf is] in between rounds I like to challenge people to duels. Awesome.



Nick Price, Age 26

I've been playing nerf since I was, wow, 10 years old, so, 18 years. Long time. My favorite thing about nerf is that anybody can do it, that it is an accessible hobby. It's good for folks like me who have a lot of energy but maybe are not so interested in established, organized sports to go outside and get some exercise. Or inside.





Ferew Belewe, Age 18

I discovered the Nerf battle event in downtown Everett online and decided to attend because it seemed like an enjoyable experience. I was not disappointed—the event was a lot of fun! The organizer was very friendly and accommodating, and the community was incredibly welcoming. I had a wonderful time and would be happy to participate again in the future.



Dawson Yurth, Age 22

I've always like Nerf blasters, back since like I'd say the Maverick era, that type of thing. But I didn't really have many people to play with growing up, but I just always liked the blasters themselves. So I started collecting them and stuff. Eventually I found this place and I'm coming here and getting to do mods and stuff.

I'd say here definitely the facts that it's indoors. It's nice that it's indoors. Dart cleanup's way easier indoors, air conditioning, lot easier to hear people, there's a lot of upsides to a big mall compared to outside.

Appendix C

Additional Research

POSITIVE BENEFITS OF PHYSICAL PLAY*

- Mood improvement and reduction in negative emotional states
- Improved self-regulation and coping strategies
- Intrapersonal development
- Cognitive improvement
- Interpersonal development
- Reversal of social isolation
- Social re-integration
- Increased prosocial behavior
- Reduction in sedentary lifestyles
- Improved trust

MORE PLAY BENEFITS**

- Studies show that make-believe games help kids learn to self-regulate their emotions, manage stress, and recover from trauma.
- Through play kids learn how to create and maintain friendships. Cooperative play hones social skills as children figure out how to negotiate group dynamics. It helps them learn how to collaborate and compromise with others, recognize and respond to others' feelings, share, show affection, resolve conflicts, and adhere to the rules.
- When faced with a problem during play, children test their reasoning and judgment, and their ability to find a solution. Make-believe play is essential for kids to develop a sense of curiosity and learn how to respond to different situations. .
- By playing with others, children learn the art of communication. They recognize facial expressions and body language. They figure out how to start and carry on conversations, and how to express their thoughts and desires in a way that maintains the fun and keeps the game going.

*Eime, Rochelle M, et al., "A Systemic Review of the Psychological Benefits of Participation in Sport for Children and Adolescents: Informing Development of a Conceptual Model of Health Through Sport," International Journal of Behavioral Nutrition and Physical Activity, 2013, 10:98.

**See Scott Barry Kaufman, "The Need for Pretend Play in Child Development," Psychology Today, 2012; see also Yogman M, Garner A, Hutchinson J, et al; AAP COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH, AAP COUNCIL ON COMMUNICATIONS AND MEDIA. The Power of Play: A Pediatric Role in Enhancing Development in Young Children. Pediatrics. 2018;142(3):e20182058.; see also Pellegrini, A. D. (2009). The role of play in human development. Oxford University Press. *Eime, Rochelle M, et al., "A Systemic Review of the Psychological Benefits of Participation in Sport for Children and Adolescents: Informing Development of a Conceptual Model of Health Through Sport," International Journal of Behavioral Nutrition and Physical Activity, 2013, 10:98.

THE NEED FOR DISRUPTION

- During July 2021 through December 2023, 50.4% of teenagers ages 12–17 had 4 hours or more of daily screen time.

- **Black teenagers (60.4%) were more likely than Hispanic (52.8%), Asian (43.5%), and White (47.9%) teenagers to have 4 hours or more of daily screen time.**



- During July 2021 through December 2023, about 1 in 4 teenagers ages 12–17 with 4 hours or more of daily screen time had experienced anxiety (27.1%) or depression (25.9%) symptoms in the past 2 weeks.
- Teenagers who had 4 or more hours of daily screen time were more likely to have had anxiety symptoms in the past 2 weeks (27.1%) compared with teenagers with less than 4 hours of daily screen time (12.3%).
- Teenagers who had 4 or more hours of daily screen time were more likely to have had depression symptoms in the past 2 weeks (25.9%) compared with teenagers with less than 4 hours of daily screen time (9.5%).

Source: Zablotzky B, Arockiaraj B, Haile G, Ng AE. Daily screen time among teenagers: United States, July 2021–December 2023. NCHS Data Brief, no 513. Hyattsville, MD: National Center for Health Statistics. 2024. DOI: <https://dx.doi.org/10.15620/cdc/168509>

Appendix D

Nerf vs. Airsoft vs. Paintball

NERF, PAINTBALL & AIRSOFT

Is There A Difference?

The activities of of nerf, airsoft, and paintball involve shooting projectiles at high velocities. The way these activities are played, however, differ significantly, in part, because of the fundamental differences between the projectiles themselves.

Table 1. Nerf foam dart impact

<u>Nerf Game Type</u>	<u>Impact Energy</u>
• Competitive Velocity - 220 FPS	• 2.7 Joules of energy
• SuperStock Velocities - 150 FPS	• 1.3 Joules of energy
• Humans vs. Zombies Velocities - 120 FPS	• 0.8 Joules of energy

Table 2. Airsoft Impact Energy

Outdoor Xtreme Chesapeake City Joule Limit Chart
Provided by Patriot Armory

FPS	Kinetic Energy in Joules								
	.20g	.25g	.28g	.30g	.32g	.36g	.40g	.43g	
250	0.58	0.73	0.81	0.87	0.93	1.05	1.16	1.25	RIFLEMAN & SUPPORT
260	0.63	0.79	0.88	0.94	1	1.13	1.26	1.35	
270	0.68	0.85	0.95	1.02	1.08	1.22	1.35	1.46	
273	0.69	0.87	0.97	1.04	1.11	1.25	1.38	1.49	
280	0.73	0.91	1.02	1.09	1.17	1.31	1.46	1.57	
283	0.74	0.93	1.04	1.12	1.19	1.34	1.49	1.6	DMR & SNIPER
290	0.78	0.98	1.09	1.17	1.25	1.41	1.56	1.68	
298	0.83	1.03	1.16	1.24	1.32	1.49	1.65	1.77	
300	0.84	1.05	1.17	1.25	1.34	1.51	1.67	1.8	
310	0.89	1.12	1.25	1.34	1.43	1.61	1.79	1.92	
317	0.93	1.17	1.31	1.4	1.49	1.68	1.87	2.01	TOO HIGH
320	0.95	1.19	1.33	1.43	1.52	1.71	1.9	2.05	
327	0.99	1.24	1.39	1.49	1.59	1.79	1.99	2.14	
330	1.01	1.26	1.42	1.52	1.62	1.82	2.02	2.18	
338	1.06	1.33	1.49	1.59	1.7	1.91	2.12	2.28	
340	1.07	1.34	1.5	1.61	1.72	1.93	2.15	2.31	
341	1.08	1.35	1.51	1.62	1.73	1.94	2.16	2.32	
350	1.14	1.42	1.59	1.71	1.82	2.05	2.28	2.45	
353	1.16	1.45	1.62	1.74	1.85	2.08	2.32	2.49	
358	1.19	1.49	1.67	1.79	1.91	2.14	2.38	2.56	
360	1.2	1.51	1.69	1.81	1.93	2.17	2.41	2.59	
370	1.27	1.59	1.78	1.91	2.03	2.29	2.54	2.73	
372	1.29	1.61	1.8	1.93	2.06	2.31	2.57	2.76	
380	1.34	1.68	1.88	2.01	2.15	2.41	2.68	2.88	
390	1.41	1.77	1.98	2.12	2.26	2.54	2.83	3.04	
395	1.45	1.81	2.03	2.17	2.32	2.61	2.9	3.12	
400	1.49	1.86	2.08	2.23	2.38	2.68	2.97	3.2	
408	1.55	1.93	2.17	2.32	2.47	2.78	3.09	3.32	
409	1.55	1.94	2.18	2.33	2.49	2.8	3.11	3.34	
410	1.56	1.95	2.19	2.34	2.5	2.81	3.12	3.36	
420	1.64	2.05	2.29	2.46	2.62	2.95	3.28	3.52	
422	1.65	2.07	2.32	2.48	2.65	2.98	3.31	3.56	
430	1.72	2.15	2.4	2.58	2.75	3.09	3.44	3.69	
440	1.8	2.25	2.52	2.7	2.88	3.24	3.6	3.87	
447	1.86	2.32	2.6	2.78	2.97	3.34	3.71	3.99	
450	1.88	2.35	2.63	2.82	3.01	3.39	3.76	4.04	
460	1.97	2.46	2.75	2.95	3.15	3.54	3.93	4.23	
470	2.05	2.57	2.87	3.08	3.28	3.69	4.1	4.41	
480	2.14	2.68	3	3.21	3.42	3.85	4.28	4.6	
490	2.23	2.79	3.12	3.35	3.57	4.02	4.46	4.8	
500	2.32	2.9	3.25	3.48	3.72	4.18	4.65	4.99	

All testing to be done with field provided .32g BBs.

While nerf impacts can equal or exceed Airsoft, plastic Airsoft projectiles are smaller and denser than nerf foam. As result, pellet impacts cause welts and can pierce unprotected skin.

Paintball impacts, on the other hand, are 3-9 times harder than nerf, and 3-13 times harder than Airsoft.

How Much Joule Has a Paintball Gun?



When it comes to **paintball**, technical questions often arise — and one of the most common is: **How much joule has a paintball gun?** In this article, we'll explain the key details about this topic so that you can enjoy your game fully prepared and informed.

Source: <https://dyepaintball.eu/en/blogs/dye-helps/how-much-joule-has-a-paintball-gun>

How Much Joule Does a Paintball Gun Have on Average?

A **paintball gun** typically has an energy output of **around 7.5 joules**, depending on the speed and weight of the paintballs used. This energy level is sufficient to ensure that paintballs can be fired over significant distances, without causing undue pain when players wear the proper protective gear.

For reference:

Standard speed: Most markers are adjusted to shoot paintballs at approximately 90 m/s (about 300 fps).

Average weight of a paintball: A paintball weighs about 3 grams.

The combination of these factors results in an average joule value of 7.5.

Source: <https://dyepaintball.eu/en/blogs/dye-helps/how-much-joule-has-a-paintball-gun>



Humans vs Zombies

Ever since the classic film *Night of the Living Dead* (1968), popular culture has been obsessed with zombies as reanimated embodiments of past sins come to torment the living. Fast-forward to the present day, the undead regularly haunt college and high school campuses – sometimes for weeks at a time. It's up to you and your nerf blaster arsenal to quell the horde or else join their ranks forever!

What Is Humans versus Zombies?

Humans versus Zombies (often abbreviated as “HvZ”) is a moderated game of tag played in large open spaces, like college and university campuses. The game starts with a few players who volunteer as Starting or Original Zombies (OZs), and their goal is to tag the players designated as humans and turn them into zombies. Meanwhile, armed with foam blasters and throwables – like rolled-up socks or foam stress balls, the humans are tasked with completing various missions and challenges around the area, all while avoiding being tagged. As the game progresses, the horde of respawning zombies grows until few to no humans are left.



What Makes HvZ Popular?

There's nothing quite like running for your life! In those moments when you just barely survive an encounter with a wave of zombies, HvZ is adrenaline-pumping and, at times, absolutely terrifying. The moderators reward your efforts when you help complete a mission with your team. And when blasters and socks are your only defense, how long you remain human becomes a badge of honor you can share with your friends.

The gameplay isn't over once you turn zombie! Unlike other foam-flinging games where you are out of play once you're tagged, with HvZ, you merely join "the winning team." Additionally, playing as a zombie can be tremendously satisfying when you run down a solo human player or catch a whole team off guard. Humans vs Zombies rewards teamwork, vigilance, and endurance, making it a blast for everyone who participates.

Article: <https://outofdarts.com/pages/humans-versus-zombies>

Alternatively, just as post-apocalyptic worlds live with risk and scarcity, missions are sometimes required to be completed to continue. If you fail, you may lose power-ups or even members of your party. Often, other groups' missions will rely on you to complete your own, and they may have to complete any failed missions for them to survive as well.

Theming

For added variety, many HvZ games are themed in some way. Depending on the organizers, this theming can be all-encompassing, with rich storylines that players can follow from mission to mission, or it can be merely a light dressing of themed NPCs and props. That being said, this is not a requirement of the game type. It's just a way to play the game in a fictional universe other than "the aftermath of a zombie outbreak."

Moderators

Last but not least, moderators (mods) are crucial in providing a safe and fun HvZ play experience. They often serve as non-player characters (NPCs) that move an overarching story along or as leaders of player groups to guide them to game objectives (often in the path of zombies). Ultimately, mods are there to keep everybody safe and resolve the rare player conflict. Remember: The difference between a good and bad game of HvZ often comes down to how you treat the volunteers who run the game!



History

Apart from being one of the blaster tag hobby's most popular events, Humans vs Zombies is also perhaps one of the oldest games still being organized and played today. HvZ was initially developed by Brad Sappington and Chris Weed, among a few other classmates at Goucher College in the Baltimore, Maryland, metro area. They hosted their first game in 2005 and included some unique rules, including a 3x5 card for player identification and a "48-hour starve-out" rule to encourage zombies to tag more players.

This early version of the game quickly spread to nearby campuses, with varying adaptations of the rules to suit each location. Often, these games happened during a whole week of school, and you could be tagged as soon as you stepped out of a building after class or when you left your residence hall to get dinner.

As early as 2008, some clubs would invite neighboring university clubs for combined HvZ events, with smaller, shorter missions than the usual week-long HvZ. These "Day Games" paved the way for HvZ's first availability to non-students.

The first recorded HvZ Invitational game (or at least the first called an invitational) was held at Pennsylvania State University in 2010. With a Kurt Vonnegut theme, Senior and English major Jamie Mortara and the PSU Urban Gaming Club were tasked with planning and promotion. On Saturday, April 10th, as many as 240 people from both neighboring universities and the general public showed up to play. The overall reception of this kind of large-scale HvZ was fantastic, and Penn State continues to host Invitationals to this day.



The screenshot shows the website for the Penn State Urban Gaming Club. The header features the club's logo and navigation links: Home, About Us, Games, Calendar, Support, Register, and Login. The main content area is titled "2010 Pennsylvania State University Humans vs. Zombies Invitational". It includes a "What is this?" section with text about the event, a photo of players in action, and a "When is it?" section stating the date as Saturday, April 10th. There are also links for registration and contact information.

PENN STATE URBAN GAMING CLUB

Home About Us Games Calendar Support Register Login

2010 Pennsylvania State University Humans vs. Zombies Invitational

What is this?
Penn State has invited HvZ-playing schools from around the Pennsylvania region and the US to send their best players to compete in the ultimate Humans vs. Zombies game. The game will start at 11am on **Saturday, April 10th** and will last until about midnight.

When is it?
Saturday, April 10th

Oh dude, I'm in!
Awesome! Confirm that you're coming on our [Facebook event](#) so we can have an accurate headcount.

Contact info

Article: <https://outofdarts.com/pages/humans-versus-zombies>

Several other university clubs and community organizations also host annual weekend invitationals of varying sizes and scopes. At these games, the public can enjoy similar thrills to the HvZ events that were once more exclusive to college students, often with more flair and immersive theming than students can get during week-long games.

There are four major HvZ invitationals, some with a unique spin on the core game mechanics. Click through the gallery below to find a summary of each event and where to find more information:

Local HvZ Clubs + Invitationals

Though larger-scale events are tons of fun to travel to and participate in, plenty of other HvZ games are organized and played throughout the United States. Many universities have HvZ clubs, and sometimes even non-students can join the fun. UMBC is known for having two of their university evening HvZ games bookend Maryland Mayhem with an unofficial five-day stretch.

HvZ: SF is a local HvZ club that has hosted publicly available games since 2011 at San Francisco State University in California. Their monthly day games are usually held in the afternoons on the second Saturday of every month. Check out their [website and Discord](#) to find out more!



Article: <https://outofdarts.com/pages/humans-versus-zombies>

Mall Mutation Madness is an invitational with the unique venue of an after-hours mall in Missouri. Alliteration aside, it's one of the more unique events on the calendar and among the few invitationals played primarily indoors.

Even local PvP clubs play HvZ! Our local club, PaNNC, occasionally hosts a small-scale game as a closing round to their once-monthly gamedays, lowering the FPS cap and designating a few OZs.

HvZ at Home

You do not have to have a college campus or invitational in your area! Humans vs Zombies is a game that can be as simple or complex as you want. Luke usually hosts a small HvZ at his family reunions. From loadout restrictions to a respawn timer, it's very customizable. All you need are some blasters, bandanas, and, perhaps, a couple of rolled-up socks.

Special thanks to:

David Gaiano, UMBC HvZ Club

President 2022-24

Jamie Mortara, Penn State

Urban Gaming Club 2006-10

Dave Stellar, [HvZ: SF](#) Organizer

2011-Present

Photography Credits:

Nathan Mo

FlyingChicken

Fish

Janet Austin

What is Airsoft?



Airsoft is a thrilling pastime enjoyed by people all over the world - and most people have at least a basic understanding of what airsoft is. To put it briefly, an airsoft definition could be summed up by saying that airsoft entails using guns that fire plastic BBs in addition to a wide variety of other gear in order to simulate real-life combat in a way that is as realistic as possible while still being completely safe. If you're

Airsoft is an exciting sport that simulates military scenarios using realistic airsoft guns. Players use these replica firearms to shoot non-metallic BBs at each other during skirmishes and military simulation (milsim) games. With various game styles, from fast-paced shootouts to elaborate milsim events, there's always something new to experience. In airsoft, teamwork is a way of life. Airsoft players work together to outsmart and outmaneuver their opponents, creating a sense of camaraderie and shared goals. The gameplay can vary from simple capture-the-flag games to complex missions that mimic real-life combat situations. Each game offers a unique challenge, making it a favorite among adrenaline seekers and tactical enthusiasts alike.

The airsoft community is a vibrant and diverse one, encompassing everyone from collectors of historical WWII replicas to fans of modern military and pop culture icons like John Wick. Whether you're a seasoned player or just curious about the sport, there's always a place for you in the airsoft world. Check out more details on What Is Airsoft for a deeper dive into this thrilling activity.

What is Airsoft?



Airsoft is a dynamic sport that brings together people interested in tactical games, historical reenactments, and realistic combat scenarios. It uses high-quality, non-lethal airsoft guns to simulate real guns and real firefights in a safe and controlled environment.

Airsoft originated in Japan in the 1970s. Due to strict gun laws, people couldn't own real firearms for recreational use. So, enthusiasts in Japan created airsoft guns to satisfy their interest in shooting sports. These replicas look like the real thing but shoot small plastic BBs instead of bullets.

Airsoft quickly gained popularity in Japan due to its realism and safety. It was only a short time before it spread to other countries.

WHAT ARE THE MAIN TYPES OF AIRSOFT EQUIPMENT?

Let's examine the essential gear you'll need to get started in airsoft. We'll also discuss the different types of guns, the science behind BBs, and the various power sources for your equipment.

Primary Weapons

Our airsoft arsenal consists mainly of primary weapons like rifles, submachine guns, and shotguns. These are your go-to choices for most gameplay situations. Among the favorites are Automatic electric guns (AEGs). AEGs use a battery-powered motor to drive the firing mechanism, providing consistent performance and the ability to shoot in full-auto mode. Secondary weapons, such as pistols, are handy for close-quarters combat or when your primary runs out of ammo. We often see players opting for a variety of these guns based on their role or style of play. Whether you're going for a tactical sniper or a fast-paced assault player, there's a setup that will fit your needs.

Hold on, let's remember our protective gear. Always wear masks, goggles, and vests to keep safe on the field. While looking cool is a bonus, safety is paramount during gameplay.

The Science of BBs



When we talk about airsoft, we must recognize the importance of BBs. These are the small, round plastic pellets that your airsoft guns fire. Standard BBs have a 6mm diameter, but their weight can vary. The most common weights are 0.20g & 0.25g. Heavier BBs can offer better accuracy and range but require more power to shoot effectively.

Biodegradable BBs are increasingly popular. These eco-friendly options break down naturally over time, reducing environmental impact. Choosing the right BBs can significantly impact performance, whether you're using a sniper rifle or a DMR (Designated marksman rifle).

Also, BBs come in different finishes, such as polished or seamless, which help improve feeding and reduce jamming. Knowing the optimal weight and type of BB for your specific airsoft gun ensures you get the best performance out of your gear.

Gas, Spring, and Electric

We categorize airsoft guns mainly by their power sources: gas-powered, spring-powered, and electric airsoft guns.

Gas-powered guns use either green gas or CO2 cartridges. These guns are often more powerful and realistic, offering blowback features that mimic real firearm recoil. The downside is that gas can be influenced by temperature and the availability of gas refills. Spring-powered guns are the simplest and often the most durable. Each shot requires manual cocking, making them less suited for rapid-fire scenarios but great for sniper roles where precision is key.

Electric airsoft guns (AEGs) are the most versatile. Powered by rechargeable batteries, they offer consistent performance and can switch between semi-automatic and automatic modes. For both beginners and seasoned players, AEGs are a staple in any airsoft collection due to their reliability and ease of use.

Understanding the different types of power sources helps us select the optimal airsoft gun for our style of play and ensures we're always ready for action.

What To Know About Playing Airsoft

Airsoft is a thrilling team-based sport where you can enjoy realistic combat scenarios using replica firearms. We'll dive into the different game formats, essential safety rules, and the excitement of milsim.

Airsoft Game Formats

Airsoft games come in various formats to keep things fresh and exciting. One popular format is the Team Deathmatch skirmish, where players engage in short and fast-paced battles. These games typically last an hour or less and are perfect for close-quarters combat. Another format is the objective-based game. In this game, players work as a team to complete tasks like capturing a flag or defending a point. These games require strategic planning and teamwork.

For those who crave more realism, there's milsim. This format mimics real military operations over several hours or days. It's like stepping into a movie, complete with missions and military tactics.

Safety and Rules

Safety is a top priority in airsoft. The first rule is to wear eye protection at all times. Your goggles or masks should meet safety standards to prevent injuries.

It's also crucial to follow the FPS limit set by the airsoft field. This refers to the feet-per-second speed at which players' guns shoot pellets. Adhering to FPS limits helps prevent injury.

Respect for other players is crucial. Never shoot at close range without calling for a surrender — this prevents unnecessary pain and keeps the game fun for all.

Finally, understanding and following the rules of each game format ensures a safe and enjoyable experience for everyone involved.

The Thrill of Milsim

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How To Gear Up for Airsoft

Ready to dive into airsoft? You'll need the right gear to stay safe and enhance your gameplay. Let's break down everything you need, from weapons and protective gear to maintenance tips.

Starter Tips for Beginners

Starting out in airsoft can be overwhelming. First, get a reliable airsoft gun, preferably an AEG (Automatic Electric Gun). These typically have an electric motor and a gearbox that power the BBs.

Next, look for a gun with an adjustable hop-up unit. This will allow you to fine-tune your gun's accuracy.

Some beginner essentials for airsoft include:

- Airsoft gun
- Batteries and charger
- BBs

Essential Protective Gear

Safety always comes first. Essential protective gear includes:

- Protective eyewear: Always wear goggles or a full-face mask to protect your eyes from BBs.
- Face masks: These prevent injuries to your face and teeth.
- Gloves and long sleeves: Avoid cuts and abrasions, especially during more intense matches.



The following are optional, but can be helpful:

- Knee and elbow pads: Great for more physical play.
- Tactical vests: These are useful for carrying extra magazines and gear.

Wearing proper gear can greatly impact your overall experience and safety.

Maintenance and Care

Taking care of your equipment ensures longevity and better performance. For your airsoft gun:

- Clean the barrel: Use a cleaning rod and cloth to keep the barrel free of dirt and debris, and to prevent rust.
- Check batteries: Regularly monitor battery levels and avoid overcharging.

For your protective gear:

- Inspect for damage: Regularly check your eyewear and masks for cracks or damage.
- Wash gear: Clean your clothing and protective equipment to maintain hygiene and comfort.

Regular maintenance means more reliable gear and a more enjoyable airsoft experience. Keeping everything in top shape helps us all play better and stay safe.

What To Know About Airsoft Culture and Community

Airsoft has a vibrant culture filled with diverse activities and interests. Enthusiasts enjoy participating in events, customizing their gear, and seeing airsoft's influence in media.

Airsoft in Media and Pop Culture

Airsoft has found its way into movies, TV shows, and video games. We've all seen those lifelike replica firearms in action scenes. Popular franchises like Call of Duty and John Wick feature airsoft guns modeled after real firearms, creating more enthusiasm among players.

It's not just Hollywood, either. Anime and cosplay communities embrace airsoft as well. Many anime fans spend hours collecting and customizing guns to mirror their favorite characters. This connection makes airsoft more than a hobby — it's a lifestyle.

Airsoft Events and Tournaments

Large-scale airsoft events are where the community truly comes alive. Imagine hundreds of players gathering for a weekend of tactical simulations and battles. These events often have themes ranging from military campaigns to post-apocalyptic scenarios.

Retailers and sponsors usually support these events, offering booths with the latest gear and equipment. Tournaments provide a competitive edge, bringing together skilled players to showcase their tactics and teamwork. It's a great way to meet like-minded individuals and form lasting bonds within the community.

Collecting and Customization

One of the most exciting aspects of airsoft is the opportunity to collect and customize. You can spend hours tweaking your replica firearms to match specific real-life models or to add unique features. Whether it's installing new scopes, modifying internal mechanisms, or painting the exterior, customization helps make your gear truly your own.

Collectors often search for rare and vintage airsoft guns, sometimes focusing on WWII models or limited-edition releases. This passion for perfecting our equipment connects us all, from military reenactors to casual weekend players.

The Bottom Line

If you're looking to get involved with airsoft, it's helpful to know the basics before diving in. From essential gear and safety equipment to basic culture and maintenance, heading into the game with an understanding of everything it entails can help set you up for success. Gearing up? At RedWolf Airsoft, we have everything you need to craft the perfect airsoft collection.

Sources:

Capture the Flag | Playworks

How Do Spring Airsoft Guns Work? | Howcast

Airsoft Guns: Why Users Should Aim for Safety | HealthyChildren.org

Milsim vs reality: Is there any application to the real world? | Range University

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A BEGINNER'S GUIDE TO PAINTBALL

CATEGORY: HOW TO



HOME > A BEGINNER'S GUIDE TO PAINTBALL

Your mission – should you choose to accept it – is to play exhilarating games of paintball at PPK, the best paintball park in the country! Many players will be familiar with the non-stop fun paintballing brings to the table, but many will also be first-timers and can find the build-up to the day intimidating.

Well listen up rookie, PPK is here to give you all you need to know about playing paintball for the first time. It's time to get your head in the game and prepare for battle!

THE RULES OF THE GAME

PLAYING SAFE

Rule one soldier: Never take off your mask unless you are situated safely back at base camp. This may sound like an obvious rule, but we emphasise this rule as often as we can to all who participate at PPK. The last thing you want is to be blinded like PJ from Byker Grove and miss out on your Saturday night takeaway!

Safety is essential when playing paintball, and it is important to remember to never shoot your gun before the game has begun. You will get the chance to walk on your field to establish the zones you will be playing on as well as being given a game breakdown by your marshal. Each of our game zones has its own objectives so make sure to listen to what is required for the game you're about to play. Our marshals are always there to help if you have any questions – they will guide you to victory.

Before a game begins you will be given a safety briefing. From here our marshals will lead you to your game zone and explain what to expect and the rules of the game mode.

YOUR OBJECTIVE

The objective of paintball is to fire paintballs at the opposition, hitting them, without being shot yourself, and eliminating them from the game. The team that dominates wins. Being new to the game, you may want to hide as much as possible, but if you hide you won't get to take in the full experience, so drop any apprehension you have when you pick up your paintball gun and get involved. You've got this!

TOP TIPS FOR PAINTBALL NEWBIES

Now you know the rules, you need to know the top tips for playing paintball and prepare yourself with a game plan.

WORK AS A TEAM

Teamwork really does make the dream work. Sure, there are heroes of every battle that stand as legends, but without working with your unit, you'll most likely end up covered in paint. As a rookie, you probably won't be tempted to charge into the line of fire, so as your team advances to new positions, it's a good idea to provide covering fire. You've also got to shout to communicate at times. Be loud and assertive when giving orders or planning your tactics. Communicate with them and have each other's backs, you are more likely to win the game if you work with each other rather than against each other.

GET TO KNOW YOUR SURROUNDINGS

Use your senses well, they will guide you to success. You might find some of your opposition trying to play a sneaky paintball game and plan to go unseen to win by hiding behind barricades, so use your eyes and ears to find them and take them out. Knowledge is key in the game of paintball. Unless a strategy calls for it, avoid rushing around the game zone otherwise you'll end up getting sprayed and eliminated from the game.

GET YOUR HEAD DOWN AND USE COVER

When moving between different points of cover, keep yourself low and your head down to reduce the chance of getting spotted and shot by the enemy players. There's plenty of cover to get behind in our game zones, whether you're holding off in the saloon in [Wild West](#) or seeking refuge by a crashed helicopter in [Battlefield](#).

KNOW AND PLAY THE OBJECTIVE

PPK offers a range of game modes and objectives when firing across our [eight game zones](#). Our marshals will brief you before the start of every game on the objectives. It might be a team deathmatch, capture the flag or sabotage type objective, so focus on what the aim of the game is, rather than just trying to shoot as many enemy players as possible.

IT'S OKAY TO GET HIT

We are 100% positive you will be hit by a paintball – make that lots of paintballs – unless you have the reflexes of a cat or are as fast as The Flash. Getting hit is perfectly normal and part of the paintball experience. We understand new players might be a little afraid and concerned with how much getting hit will hurt but have no fear. PPK will kit you out with ample protection from head to toe. We give you masks, gloves and overalls with [options for upgraded gear](#). Plus, in recent years, paintballs have evolved to be less painful when they hit you and, once you get hit, you'll realise it's no more painful than getting flicked with an elastic band.

PLAY PAINTBALL THE PPK WAY

Let's go over how to play paintball for the first time the right way:

- **USE THOSE SENSES TO YOUR ADVANTAGE.**
- **COMMUNICATE WITH YOUR TEAM.**
- **KNOW YOUR OBJECTIVES.**
- **ASK ADVICE FROM THE MARSHALS IF YOU ARE UNSURE OF ANYTHING.**
- **ALWAYS KEEP YOUR MASK ON!**