

Benefits and Applications of BI2 Technologies' AI-Vigilant™ powered by Lumana in Correctional Facilities

Introduction

In the challenging environment of correctional facilities, maintaining safety, security, and order—known as the responsibilities of "care, custody, and control"—is paramount. **AI-Vigilant™**, BI2 Technologies' latest biometric solution, uses video AI (Artificial Intelligence) to enhance these responsibilities by monitoring, analyzing, and alerting officers to potentially hazardous or prohibited behaviors in real-time. By using advanced video analytics, jails and correctional facilities can not only improve response times to incidents but also prevent many incidents from occurring.

This document outlines the overarching benefits of AI-Vigilant in jails and corrections, provides specific examples of its application across different facility and operational areas, and highlights specific tasks where AI can significantly aid officers.

Overall Benefits of AI-Vigilant in Jails

1. Enhanced Safety and Security

- AI-Vigilant™ continuously monitors inmate activity, alerting staff to suspicious or unauthorized behaviors.
- Potential threats like contraband, weapons, or altercations can be identified instantly, allowing officers to respond immediately.

2. Reduced Burden on Officers

- AI-Vigilant™ automates monitoring tasks, reducing the need for officers to watch screens for extended periods.
- This automation allows officers to focus more on proactive security measures, interpersonal interactions, and administrative tasks.

3. Improved Accuracy and Reliability

- AI-Vigilant™ reduces human error, as it does not suffer from fatigue, distractions, or biases.
- It enhances accountability by accurately capturing events, assisting in incident investigations, and supporting officer decision-making.

4. Support for Inmate Welfare

- AI-Vigilant™ is especially beneficial for monitoring high-risk areas like suicide-watch cells and health units, where timely intervention is critical.
- By flagging unusual behaviors (e.g., signs of self-harm or distress), AI-Vigilant™ assists in inmate welfare and health.

5. Streamlined Incident Documentation and Reporting

- AI-enabled cameras automatically record relevant footage when an incident is detected, which simplifies reporting and post-incident review.
- This functionality saves administrative time and creates clear, organized evidence trails for investigative purposes.

Recommended Placement and Application of AI-Vigilant in Correctional Facilities

Below are twenty-five facility areas where AI-Vigilant™ can be highly beneficial, each with specific examples of tasks and scenarios in which AI monitoring will enhance security, safety, and operational efficiency.

1. Sallyports and Entrances

- **Unauthorized Access Detection:** Detects unauthorized individuals in restricted zones, enhancing control over facility entry points.
- **Contraband Detection:** Identifies prohibited items that may be brought in with inmate transfers or visitor entry.

2. Suicide-Watch and High-Risk Cells

- **Detection of Self-Harm Behavior:** Recognizes signs of self-harm, such as specific body movements or use of sharp objects, triggering alerts for immediate intervention.
- **Unusual Behavior Monitoring:** Flags extended periods of stillness, excessive agitation, or distress behaviors, assisting officers in monitoring high-risk individuals.

3. Kitchen and Food Preparation Areas

- **Unauthorized Access:** Alerts if inmates or staff without clearance enter this restricted area.
- **Item Tracking:** Detects removal of sharp objects or other potentially dangerous kitchen tools.

4. Visitation Rooms

- **Contraband Passing Detection:** Identifies objects passed between visitors and inmates, alerting officers to potential smuggling attempts.
- **Monitoring Visitor-Inmate Proximity:** Ensures compliance with physical distancing rules, flagging any close interactions when necessary.

5. Recreation and Common Areas

- **Fight and Altercation Detection:** Recognizes sudden or aggressive movements, alerting officers to intervene in potential altercations.

- **Suspicious Behavior Analysis:** Identifies gatherings in unusual locations or movement patterns indicating unauthorized activities.

6. Inmate Housing Units

- **Presence Monitoring:** Tracks inmate movement to flag missing individuals or unauthorized presence in restricted areas.
- **Behavioral Monitoring:** Alerts officers to attempts at tampering with security features, such as covering cameras or moving objects to obscure detection.

7. Healthcare and Medical Units

- **Patient Monitoring:** Detects signs of physical distress (e.g., collapse, seizure) for quick intervention.
- **Sanitation Compliance:** Monitors for proper hygiene protocols, especially during outbreaks or health crises.

8. Holding Cells and Intake Areas

- **Behavioral Monitoring During Intake:** Identifies aggressive or self-harming behaviors among newly admitted individuals who may be distressed or agitated.
- **Contraband Detection:** Monitors for hidden objects or attempts to smuggle contraband during intake procedures.

9. Administrative Offices and Staff-Only Areas

- **Unauthorized Access Alert:** Recognizes and alerts if inmates attempt to enter staff-only areas.
- **Document Security:** Monitors for unusual movements or attempts to access sensitive files or records, protecting confidential information.

10. Laundry and Utility Rooms

- **Prohibited Access Monitoring:** Detects unauthorized entry by inmates who may attempt to hide items or tamper with equipment.
- **Contraband Detection:** Monitors for hidden or illegal objects placed in laundry carts or concealed in clothing.

11. Classrooms and Rehabilitation Program Rooms

- **Behavioral Monitoring:** Flags signs of aggression or escalating tension during classes or therapy sessions, allowing officers to prevent conflicts.
- **Unauthorized Item Detection:** Detects prohibited items in educational or rehabilitative settings, where interactions are sometimes less monitored.

12. Chapel or Religious Service Areas

- **Prohibited Interactions:** Identifies close contact where distancing is required or flags attempts to pass contraband in areas where congregating is typical.
- **Unusual Behavior Detection:** Monitors for abnormal movements or disruptive behaviors during services, which are sensitive environments where officers may wish to intervene discreetly.

13. Library and Commissary Areas

- **Inventory Control:** Detects attempts to steal or hide books or other items from the library or commissary.
- **Behavioral Monitoring:** Flags potentially disruptive or suspicious behaviors, such as crowding in one area or unusual handling of items.

14. Exercise Yards

- **Fight Detection and Prevention:** Recognizes aggressive movements, alerting officers to potential physical confrontations in the open yard.
- **Contraband Detection:** Identifies if objects are being passed or hidden in outdoor areas, reducing the chance of weapons or drugs being concealed.

15. Visitor Waiting and Check-In Areas

- **Visitor Behavior Monitoring:** Monitors visitor waiting areas for suspicious behavior, identifying potential threats before individuals interact with inmates.
- **Compliance with Entry Protocols:** Ensures visitors adhere to check-in procedures and maintains security in areas leading to inmate visitation rooms.

16. Corridors and Hallways

- **Traffic Flow Management:** Tracks movement in hallways to prevent overcrowding and congestion, reducing risks during transitions.
- **Unauthorized Access Monitoring:** Flags if inmates access restricted hallways or attempt to approach secure areas.

17. Isolation Cells and Segregation Units

- **Close Behavioral Monitoring:** Identifies agitation or unusual behavior in high-risk individuals isolated due to disciplinary or security concerns.
- **Inactivity Detection:** Prolonged periods of stillness trigger alerts, which can indicate medical issues or other emergencies.

18. Storage Rooms and Supply Closets

- **Unauthorized Access Alert:** Detects unauthorized entry by inmates or individuals without clearance, preventing access to potentially hazardous materials.

- **Inventory Tracking:** Alerts if any essential equipment, cleaning supplies, or other items are moved or missing, ensuring materials are secure.

19. Maintenance and Mechanical Areas

- **Safety Compliance Monitoring:** Tracks access to ensure only authorized personnel are in areas with potentially dangerous machinery.
- **Tampering Alerts:** Detects attempts to tamper with facility infrastructure, such as air vents, electrical panels, or other sensitive equipment.

20. Receiving and Shipping Areas

- **Package and Contraband Scanning:** Detects unusual items or contraband during delivery intake.
- **Restricted Access Control:** Monitors who enters and exits shipping areas, where items could potentially be smuggled into the facility.

21. Officer Break Rooms and Locker Rooms

- **Unauthorized Access:** Detects if inmates attempt to enter areas designated exclusively for staff.
- **Equipment Security:** Alerts if any items, such as radios or restraint devices, are removed without authorization.

22. Shower Areas

- **Privacy-Sensitive Behavioral Monitoring:** Monitors for unusual behaviors, ensuring inmate safety while respecting privacy protocols.
- **Incident Detection:** Recognizes rapid movements or signs of aggression, alerting officers to potential altercations or assaults.

23. Infirmary Waiting Areas

- **Behavioral Monitoring for High-Risk Patients:** Identifies signs of distress or agitation in inmates waiting for medical care.
- **Queue Management:** Monitors crowding and ensures orderly movement of inmates awaiting medical services, helping staff manage access and reducing risks.

24. Outdoor Perimeter and Fences

- **Intrusion Detection:** Identifies attempts to breach the perimeter fence or tamper with security systems, providing early warnings.
- **Escape Prevention:** Detects unusual movement patterns or proximity to the perimeter, alerting staff to potential escape attempts.

25. Waste Disposal Areas

- **Contraband Detection:** Monitors waste disposal to prevent inmates from discarding contraband or hiding prohibited items among trash.
- **Restricted Access:** Ensures only authorized personnel are present, especially if the area leads outside the secure perimeter.

Key Tasks AI-Vigilant Can Perform to Support “Care, Custody, and Control”

1. **Automated Detection of Prohibited Items:** AI-Vigilant can scan for objects that are not allowed in the facility, such as weapons, contraband, or sharp objects. If these items are detected, the system immediately alerts officers, preventing potential threats.
2. **Real-Time Alerts for Unauthorized Presence:** AI-Vigilant can quickly identify individuals based on uniform color or other visual indicators, alerting officers if someone enters an area where they are not permitted. This monitoring can assist in identifying inmates or unauthorized individuals attempting to gain access to restricted areas.
3. **Behavioral Monitoring and Early Intervention:** By analyzing patterns of behavior, AI-Vigilant can recognize signs of escalating tensions, physical confrontations, or potential for self-harm. The system’s ability to analyze body language and movement patterns offers preventive intervention capabilities, allowing officers to respond to incidents before they fully escalate.
4. **Incident Prediction and Prevention:** AI-Vigilant, through pattern recognition, can learn from past incidents to predict behaviors that have historically led to conflicts or dangerous situations. For instance, the system can alert staff if two inmates with a history of violence against each other are in proximity, thereby proactively preventing altercations.
5. **Enhanced Contraband Control:** In areas where inmates interact with external personnel, such as visitation rooms, AI-Vigilant can detect attempts to pass contraband, reducing the incidence of illicit items being smuggled into the facility.
6. **Inmate Welfare Monitoring:** AI-Vigilant is invaluable for monitoring inmates on suicide watch or those with health concerns. By alerting staff to prolonged inactivity or distress signs, the system enables faster intervention, supporting inmate welfare and safety.
7. **Simplified Reporting and Documentation:** By automatically recording events when incidents occur, AI-Vigilant streamlines the documentation process for investigations. The system can compile footage and organize it for review, saving valuable time for corrections staff and ensuring accuracy.

Why BI2 Technologies Is the Ideal Provider of AI-Vigilant™ Technology for Jails and Correctional Facilities

BI2 Technologies has established itself as a trusted, pioneering partner in the correctional industry. With a **proven track record in Sheriff’s Offices, jails, correctional facilities and law enforcement agencies** across the U.S., BI2 stands out not only as a provider of

advanced technology but as a company deeply committed to the success and safety of its clients. Here's what sets BI2 apart:

1. **Industry Expertise and Unmatched Customer Service**
 - BI2 Technologies understands the unique needs of correctional facilities and law enforcement. This knowledge enables BI2 to deliver **cutting-edge, industry-specific solutions** tailored to the demands of corrections.
 - The company's **customer service and technical support are unmatched** in the industry, ensuring that facilities have reliable, 24/7 access to assistance when they need it most.
2. **A Portfolio of Industry-Leading Biometric Solutions**
 - BI2 Technologies offers a comprehensive suite of biometric tools, such as **I.R.I.S. (Inmate Recognition and Identification System)**, which is widely regarded for its accuracy and security in inmate identification.
 - These solutions have **redefined standards in security and efficiency** within the corrections space, reflecting BI2's ongoing commitment to leading the industry with innovative, effective technology.
3. **Partnerships That Transcend the Typical "Vendor" Relationship**
 - BI2 Technologies fosters genuine partnerships with Sheriff's Offices and correctional agencies, treating each collaboration as a **long-term commitment to enhancing facility safety and security**.
 - BI2's relationships with law enforcement transcend a typical vendor-client dynamic. BI2's **staff is committed to the nation's Sheriffs, jails, and correctional environment**, with a level of understanding that few, if any, other companies can match.
4. **Commitment to the Corrections Community**
 - BI2's team includes individuals who **understand the operational demands of corrections** and share a passion for supporting those who work in law enforcement. This commitment is evident in the company's approach to client support and problem-solving, which consistently prioritizes the safety and effectiveness of each correctional facility.

With BI2 Technologies as a partner, correctional facilities are equipped not only with industry-leading AI-Vigilant™ technology but also with the assurance of dependable support, insightful guidance, and a company that prioritizes their safety and success.

Real-World Scenarios of AI-Vigilant™ in Action

1. Officer Assault Prevention and Rapid Response

Scenario: An officer is completing his regular rounds when, without warning, several inmates initiate a sudden, unprovoked assault. With his back turned, he struggles to defend himself and is unable to reach his radio to call for help. Simultaneously, the officer stationed in the monitoring tower is temporarily focused on another incident

occurring nearby. However, the facility's AI-Vigilant system, programmed to recognize signs of aggressive behavior and coordinated movements, immediately identifies the situation as high-risk. It automatically alerts all available officers and supervisors to the incident, enabling a rapid response that mitigates further harm.

In addition, AI-Vigilant's™ advanced algorithms can analyze potential threats by identifying scenarios that may precede an assault, such as groups of inmates moving in sync toward an officer. By recognizing these early indicators, the system can help prevent dangerous incidents before they unfold, enhancing officer safety and facility order.

2. **Weapon Removal in the Kitchen**

Scenario: During a routine day in the kitchen, an inmate discreetly removes a sharp knife and attempts to conceal it. The incident occurs when officers' focus is divided across other tasks. However, AI-Vigilant™, designed to detect unusual movement or tampering with kitchen tools, alerts staff immediately to the anomaly. Nearby officers can intervene, confiscating the weapon before the inmate exits, thereby preventing a potential threat to others.

3. **Contraband Passing During Visitation**

Scenario: In the visitation area, a visitor discreetly hands an inmate a package of contraband hidden inside an innocent-looking item. AI-Vigilant™, programmed to identify prohibited object transfers, recognizes the exchange as suspicious. The system instantly flags the incident, allowing officers to intercept the item and prevent illicit materials from entering the facility, maintaining security.

4. **Flooding and Property Damage in Cells**

Scenario: An inmate, agitated and frustrated, repeatedly flushes his toilet, causing water to flood his cell and overflow into adjacent areas. In some cases, inmates may use this method to mix toilet water with urine or feces, creating unsanitary conditions. AI-Vigilant™, recognizing this unusual behavior pattern and repeated motion near the toilet, alerts officers promptly. Staff are able to intervene quickly, preventing significant property damage, unsanitary conditions, and escalating distress for neighboring inmates.

5. **Suicide Attempt in High-Risk Cells**

Scenario: A recently admitted inmate, housed in a high-risk cell for mental health monitoring, begins exhibiting subtle signs of self-harm. Although no officers are nearby, AI-Vigilant™, trained to recognize specific body positions and repetitive motions associated with self-harm, sends an alert to all available staff. Officers arrive promptly, intervening before the inmate can inflict significant harm, possibly saving a life in the process.

6. Illicit Tattooing and Health Hazards

Scenario: Two inmates, taking advantage of a quieter moment in the common area, start an unsanctioned tattooing session with improvised and unsanitary tools. AI-Vigilant™, detecting specific postures and repetitive movements associated with tattooing, triggers an alert. Officers can intervene to prevent the spread of infections and potential gang-related marking, which helps maintain facility control and safety.

7. Gang-Related Violence Prevention

Scenario: During recreation time, a known gang member approaches a rival in what appears to be a prelude to an altercation. Using pattern recognition based on historical data, AI-Vigilant™ identifies the interaction as a potential threat. The system notifies nearby officers, who separate the individuals, preventing a violent confrontation and maintaining a secure environment for all inmates.

Addressing Common Concerns About Video AI in Correctional Facilities

While video AI-Vigilant™ offers numerous advantages for enhancing safety and operational efficiency in correctional facilities, it's important to address some of the perceived concerns and limitations associated with this technology. Understanding what AI-Vigilant™ is—and *isn't*—clarifies its role in supporting, rather than replacing, the essential work of corrections officers.

1. Video AI is a Tool, *not* a Replacement for Human Officers

- AI-Vigilant's™ purpose is to help corrections officers be better at their jobs, not to do their jobs for them. While AI-Vigilant™ can quickly alert officers to potential risks, it's the officers themselves who assess and respond to each situation with professional judgment and experience.
- Corrections officers are, and always will be, essential to facility safety. The unique insights, decision-making, and empathy officers bring cannot be replicated by technology. Instead, AI-Vigilant™ supports officers by automating repetitive tasks and providing real-time alerts, allowing them to focus on direct interactions and proactive security measures.

2. Video AI Isn't Perfect (And It Doesn't Have to Be)

- Like any technology, video AI is not infallible; its primary role is to enhance human capabilities, not replace them. It may detect unusual behavior patterns or potential hazards, but the final decision always rests with human officers who bring their expertise and judgment to every situation.
- By handling initial monitoring tasks, video AI acts as an extra set of "eyes" that can reduce human error due to fatigue or distraction, helping officers stay alert and informed. However, **AI-Vigilant™ functions best when combined with human oversight**, creating a collaborative approach to facility safety.

3. AI-Vigilant™ Does Not Create a "Big Brother" Environment

- AI-Vigilant™ does not introduce new surveillance but rather **optimizes existing camera infrastructure** to make it more effective. Cameras are already in place to ensure facility security, and AI-Vigilant simply uses these cameras to provide officers with more actionable, real-time insights.
 - Importantly, AI-Vigilant's™ purpose is to monitor for safety concerns, not to infringe on privacy or create an invasive environment. By quickly identifying potential risks, AI-Vigilant™ allows officers to take swift action to maintain security while respecting the rights and dignity of all individuals in the facility.
4. **Supporting Officers' Roles and Enhancing Safety Culture**
- AI-Vigilant™ reinforces the safety culture within a correctional facility by providing officers with tools that help them respond effectively to incidents and potential risks. This collaboration between technology and officers **strengthens the facility's overall security** and ensures officers have the resources needed to do their jobs more safely and confidently.
 - By helping officers spend less time on routine monitoring and more on proactive tasks, AI-Vigilant™ fosters a balanced environment where technology supports the human element that remains at the heart of corrections work.

In summary, AI-Vigilant™ in jails and correctional facilities enhances the capabilities of the current security infrastructure, offering corrections officers additional support without replacing their critical role. By working in tandem with officers, AI-Vigilant™ improves safety outcomes while allowing officers to focus on what they do best, ensuring the well-being and security of everyone within the facility.

Conclusion

AI-Vigilant™ has the potential to revolutionize the daily operations within correctional facilities by enhancing the responsibilities of "care, custody, and control." Through automated monitoring, real-time alerts, and behavior analysis, AI-Vigilant™ supports officers in maintaining security, improving inmate welfare, and streamlining incident response. By implementing AI-Vigilant™ in areas such as sallyports, high-risk cells, visitation rooms, and common areas, facilities can leverage advanced monitoring to reduce risks, improve response times, and increase overall safety.