

Children Safety System:

This system will provide optimum visibility, security and safety for all children in the classroom. Through motion-sensory and real time tracking and monitoring, the Child Safety and Attendance Tracking system will allow teachers to always know the whereabouts of the children and will allow the site director to plan staff accordingly. In addition, the system provides an audit trail that produces detailed documentation, reports and statistical information relating to certain classroom behaviors (i.e. inclusion versus exclusion). The system will prevent a child from being left alone and it will improve the work process of attendance mandated reporting. Real time locator technology can be used to collect each child's regular activity pattern throughout the classroom which can help determine program planning. This system will provide:

- Automated Attendance Verification
- Real-Time Monitoring
- Preventing Accidents
- Security
- Improved Work Process

Automated Attendance Verification

Verifying children who are registered in the childcare center by registration standards such as age, time in care, references and etc. Attendance can now be done without consuming much of the childcare center staff's time. With a PDA, laptop or desktop in the front desk of the childcare center programmed with the RTLS coordinator, hundreds of children (including infants and toddlers) can be identified, updated and matched in a matter of seconds.

Real-Time Monitoring

Continuous monitoring of children allows staff to routinely check up on children and monitor their abnormal movement easily with the RTLS monitoring viewer on the computer screen. The movement of children is presented on the screen of the Staff's computer in each classroom as well as in the administration office, to ensure that staff members can check on the situation of child efficiently and effectively from various locations. This will allow staff to be able to instantly deal with dangerous situations and prevent children from being separated from the childcare center.

Accident Prevention

When children enter into predefined dangerous area set in the RTLS system, an alarm is automatically transmitted to staff and a potential accident can therefore be prevented. Children Safety System can also monitor staff. If a staff member leaves the classroom, the monitoring system can send an instant alert so that we can prevent unforeseen accidents that may happen.

Security

The coordinator can track all children leaving the childcare center and raise an alarm if a child leaves the childcare center without approval or permission from staff.

Additionally, if someone attempts to take an infant or child wearing our RTLS tag through a protected doorway or other point of exit, the RTLS system will automatically trigger an audible alarm. Staff can then view computer screens to determine in which zone the child is located, as well as the child's identity.

Improved Work Process

By using the RTLS system, staff can utilize an automatic, electronic attendance management system, which is much easier and more efficient than the past method of managing attendance history manually. Using a more advanced system of RTLS can reduce the long-term time and costs associated with childcare center management. Every work process is performed automatically on the RTLS system, so staff can expect a decrease of overall error rates and an increase in work efficiency.

Special Care (Optional Feature)

Sometimes staff members are required to care for children who have special medical needs and need to be given medicine periodically. With the RFID/RTLS program, an alarm will be set for the child so that staff will know precisely when to administer medication and provide various other special care treatment for the children under their supervision.

Fire Alarm (Optional Feature)

The RTLS tag also has a smoke detection sensor function. It can detect a smoke and fire and thus is able to inform children and staff of a fire before it spreads widely. We can also figure out the ignition point through the IP based camera, which can reduce the extent of damage.

Notations:

RFID: Radio Frequency Identification

RTLS: Real Time Location System.