

Safety Planning for Adolescent Suicide Prevention

Suicide is a leading cause of death among youth (ages 10-24), and safety planning is a core intervention recommended when young people express suicidal thoughts or behaviors (1) (2). A clinician-supported safety plan is a **personalized**, **written list** of warning signs, coping strategies, social supports, emergency contacts, and means-reduction steps that an at-risk youth can use during a crisis 3 4. The classic Stanley-Brown model for safety planning (endorsed by SAMHSA and other agencies) specifies six elements: (1) personal warning signs of an impending crisis; (2) internal coping strategies; (3) social contacts and activities that provide distraction; (4) family/friends who can offer help; (5) professional and crisis-line contacts; and (6) ways to make the environment safe (e.g. removing access to lethal means) 3 5. Safety plans should be collaboratively developed with the youth (and ideally family/caregivers) in clear, ageappropriate language 6 7. For example, one guideline notes that safety plans should "be personalized to each patient," "developed collaboratively with each patient and family," and be "developmentally, culturally, and linguistically appropriate" 6. Involving parents or quardians is emphasized for minors: clinicians are advised to "make a safety plan with the patient and parent/caregiver" when possible $\binom{7}{}$ 6. During development, clinicians should empathically explore the youth's thoughts ("What will you do if it is 2:00 AM and you are thinking of killing yourself?") and have the youth explicitly identify coping strategies (e.g. calling a trusted relative, listening to music, writing in a journal, exercising) and supports [8].

Broad guidelines (e.g. from the AAP and SAMHSA) recommend that safety planning be **universal** for youth at risk ³ ⁴, integrated with lethal-means counseling and follow-up care, and revisited periodically. For instance, the American Academy of Pediatrics advises pediatricians to **screen all adolescents** for suicide risk and to conduct safety planning (plus remove lethal means) for any identified risk ³. In practice, clinicians (including doctors, nurses, social workers) often use standardized tools or worksheets (e.g. NIMH's ASQ youth worksheet ⁷) to ensure all core elements are covered. One clinician survey found that about 65% of providers used *all six* core safety plan elements; those with formal SPI training were more likely to implement plans fully ⁹. Notably, although safety planning is widely endorsed, a 2025 systematic review found **limited empirical evidence** that SPI alone reduces adolescent suicide ideation or attempts ². This suggests safety planning should be embedded within comprehensive care (psychotherapy, family interventions, etc.), not used in isolation. Nonetheless, safety planning is considered best practice: SAMHSA even distributes a printed "Safety Plan" pad (for pull-off sheets) based on the Stanley–Brown model ⁴, and training programs (e.g. Zero Suicide) treat safety planning as a core skill.

Table 1 below summarizes evidence-based safety-plan components (features) and their functions. Youth should explicitly identify their personal warning signs or *triggers* (early thoughts, feelings, or situations) so they can deploy coping strategies before a crisis peaks ³. They should list concrete *coping strategies* (distractions, relaxation, journaling, deep breathing, exercise, etc.) that they know help them manage distress ³. The plan should include *social supports* (friends, peers, or activities that help distract) and *trusted family/friend contacts* whom they can reach out to for comfort or help ³. Emergency contacts must be listed – typically clinicians (therapists, counselors), local hospitals, and crisis hotlines (for example, 988 or text lines) ¹⁰. A key component is *means safety* – steps to remove or secure lethal means (e.g. safely storing guns or disposing of excess medications) ³ ¹¹. Including *reasons for living* or personal motivations (photographs of loved ones, hopeful messages) can provide additional protective focus (e.g. the VA's Safety

Plan app prompts a "reasons to live" list) 12 . (Many apps also include mood or symptom tracking so that youth can notice patterns in mood that may foreshadow crises.)

Safety Plan Feature	Function / Rationale
Warning signs (triggers)	Identifies early internal cues (thoughts, feelings, situations) that an emotional crisis is emerging ³ .
Coping strategies	Lists self-soothing or distracting actions (breathing, hobbies, journaling) to calm down before things escalate $\ ^{3}$.
Social contacts/ distractions	Reminds the youth to engage with friends or go to safe places that have helped in the past 3.
Family/Friend support	Names trusted adults or family members who can provide support or help remove one from crisis if needed 3.
Professional/crisis contacts	Includes therapists, doctors, 988 Suicide & Crisis Lifeline, or emergency services – resources for immediate help 10 .
Means reduction	Outlines steps to secure or remove access to lethal methods (e.g. safe gun storage, locking up meds) ³ ¹¹ .
Reasons for living	Reminds youth of personal values and motivations (e.g. messages or photos of loved ones) to bolster hope 12 .

Best practices emphasize that safety plans be collaboratively developed and regularly reviewed. Clinicians should "listen, empathize, and engage" the youth throughout planning; experience shows that plans co-created with youth (and family) are used more often in crisis ³ ⁶. Plans must also be appropriate to adolescents – using language and examples that resonate with a 12–17-year-old's world. The AAP notes safety plans should be developmentally, culturally, and linguistically appropriate ⁶, and clinicians are advised to present them in non-judgmental, youth-friendly terms (for example, the "fire drill" analogy helps teens understand planning) ¹³. Training clinicians in SPI is important: one survey found formal SPI training strongly predicted use of all plan elements ⁹. Lastly, safety planning should involve a quick but thorough assessment (often part of suicidal ideation screening) and linkage to follow-up care (scheduling therapy, family intervention, etc.) ¹⁴ ¹⁵.

Designing a Safety-Planning App for Adolescents

A mobile app can make a safety plan readily accessible and engaging for teens. To be effective, the app's **features** should mirror best practices above: it must let users list their personal warning signs, coping skills, supportive contacts, and crisis resources, and prompt means-safety actions. For example, apps like the VA's *Safety Plan* include step-by-step entry fields for each of the six SPI elements ⁵. In app form, additional evidence-based functions can be included: push notifications to review the plan when risk factors appear, mood trackers, journaling or drawing tools, guided breathing exercises, and quick-dial buttons for contacts. Crisis hotline access (tel 988 or chat/text) should be built in for one-click reach. Features should be grounded in the evidence: for instance, means safety is a high-impact strategy ¹¹, so the app might include reminders or checklists to secure dangerous items. Emotional coping tools (calming sounds, games, or motivational videos) can supplement the user's chosen strategies.

Table 1 (above) outlines how each safety plan component translates to app functionality. In practice, this means the app should allow **customization**: the adolescent must be able to enter *their own* warning signs, coping ideas, and contacts (rather than generic advice) ³ . It should also include an embedded or linked backup (e.g. automatically offer to call 988 or send a crisis text as a "Plan B" if other strategies fail) ¹⁰ . Ideally the app would support multiple modalities (text, audio, images) so teens can, for example, upload pictures of loved ones as reminders.

 FeaturePurpose/Function Personal Warning Signs strong>Identify individual triggers (thoughts, feelings, behaviors) so youth recognize a crisis starting 3. The app can prompt them to review their plan when mood tracking or self-assessment indicates risk. Coping Strategy BankProvide a menu of soothing or distracting activities (games, videos, breathing exercises, journal entries) that help teens calm down 3. The app might guide users through deep-breathing or mindfulness exercises when needed.</ td> strongfriends or family they trust. The app can store contact info and allow one-tap calls/texts to each person (or safe places) to seek support 3 . Professional/Crisis ResourcesEnsure immediate help is available: list clinicians and hotlines. App should have quick-dial buttons for 988 (Suicide Lifeline) or local emergency numbers, and may also include text/chat options 10 .<t ChecksRemind teens and caregivers to secure or remove lethal means (e.g. firearms, medications). For instance, the app could prompt a checklist item or educational tips on safe storage 11 .</ td> strong>Reasons to Live/Goal Reminders Strengthen motivation to stay safe. The app can allow users to save photos, videos, or notes about important values and people, helping them recall why they should keep living.

Adolescent User Experience

The **UX** of the app must suit teens: it should be simple, engaging, and respectful. Use a clean, appealing interface with youth-friendly graphics and a conversational tone. Language must be clear (around 6th–8th grade reading level) and culturally sensitive. The design should avoid being too clinical or stigmatizing; for example, safety planning can be introduced via relatable analogies ("fire drill for a mental health emergency") ¹³. Multimedia elements (audio guides, animations) and gamification (rewards for engaging with the plan) can increase appeal, as long as they do not trivialize the seriousness. Crucially, development should be **user-centered**: co-designing the app with adolescents (especially those with lived experience of suicidal thoughts) ensures the features actually meet their needs ¹⁶. Studies emphasize that lack of fit with youth preferences undermines engagement; by contrast, participatory design (involving teens and clinicians in development) is strongly recommended to improve feasibility and acceptability ¹⁶. The app should also be accessible (work on low-cost smartphones, support offline use, comply with accessibility guidelines for disabilities, offer language options). Real-time usability testing with diverse teens can help refine tone, navigation, and content to keep them engaged in moments of crisis.

Data Privacy and Security for Minors

Given the sensitivity of suicide planning data for minors, robust privacy safeguards are essential. **COPPA compliance:** Children under 13 (applicable to 12-year-olds) require parental notice and verifiable consent before collecting personal information ¹⁷. The app must *explicitly* inform parents about data practices and obtain consent if any data (e.g. names, contacts, or any usage analytics) are collected from users <13 ¹⁷. **Data minimization and security:** Store only what is strictly needed. Ideally, most data can reside locally on

the device (not in the cloud) to reduce breach risk. Use device-level protections (PIN or biometric lock) as an additional safeguard, since, as one app's privacy note explains, "user data are only as secure as the phone/ device itself" 18. Encrypt any stored data and use secure transmission protocols (HTTPS/TLS) if syncing with a server or clinician portal. If the app allows sharing the safety plan with a therapist or parent (which can aid clinical integration), ensure that any transmission is encrypted end-to-end. As the VA Safety Plan app notes: if the user shares data with a health provider, the provider must then comply with HIPAA 18. In practice, this means any clinician-facing component of the app (e.g. email or portal) must meet HIPAA standards (secure, audit-logged). If the app is purely consumer-facing and data never leave the device, HIPAA may not apply; however, developers should still treat all user data as highly confidential. A clear privacy policy (with simplified language for teens) should explain how data are stored, who can access them, and how the user or parent can delete data.

Regulatory and Ethical Considerations

HIPAA: If the app is offered through or integrated with a healthcare provider (as part of therapy), it may be subject to HIPAA Privacy and Security Rules. In that case, all PHI (safety plan entries, personal notes) must be protected accordingly. (If the app operates standalone without storing data on any covered entity's servers, HIPAA may not technically apply, but best practice is to follow equivalent safeguards anyway.) COPPA: As noted, apps targeting children <13 trigger COPPA. Design the app store description and onboarding so it's clear whether the app is directed to children. If so, implement parental verification and explicit consent steps 17 . FDA/Medical Device: Most suicide-prevention apps are considered "wellness" or "administrative support" tools, and do not require FDA clearance if they do not claim to treat or diagnose a condition. However, developers should monitor FDA guidance (via the Digital Health Center of Excellence) in case it issues new rules on mental health apps. At minimum, avoid unsubstantiated treatment claims. COPPA 2.0: Note that emerging legislation (e.g. proposals to extend children's privacy protections up to age 17) may affect older minors in the future. Clinical oversight: Ethically, the app should emphasize that it does not replace professional care. For example, the VA notes its Safety Plan app is "not intended to replace professional care" and suggests creating the plan with a clinician if possible 19. The app can reinforce this by including disclaimers like "We're not doctors - if you're in immediate danger, call 911 or go to an emergency room." It should also provide links or referral workflows so that if a clinician is involved, the plan can be shared securely with them (with the youth's consent). Developers should consult with mental health professionals to ensure the content is appropriate and should consider an ethics review if deploying the app in a clinical trial or large-scale program.

Summary: In summary, evidence-based safety planning for teens involves collaboratively identifying personalized triggers, coping strategies, supports, and safety measures ³ ⁶. A mobile app to support this should faithfully implement these features (see Table 1) in an engaging, youth-friendly way, while rigorously protecting the user's privacy and adhering to all relevant laws (COPPA, HIPAA, etc.) and ethical standards ¹⁷ ¹⁸. By combining best practices from clinical guidelines with thoughtful design and data safeguards, such an app can be a powerful tool to help adolescents and their caregivers manage suicide risk.

Sources: Peer-reviewed studies, clinical guidelines, and expert resources informed this report 3 4 7

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