CHAPTER 15

Fitness

New here? Ready, Set, Ready is a 10-minute starting point: an honest assessment, one gap closed for real, then a map for using the rest of this site. Once something's actually happened, Surviving picks up where this chapter leaves off, organized by chronology instead of category. Curious how Tier, Stage, and Phase relate? See the Glossary.

Why This Category Matters

Nearly every other chapter in this manual assumes a body capable of carrying it out: hauling water, evacuating on foot, clearing debris, working a hand-crank tool, digging a garden bed, or simply staying upright through a physically demanding day on reduced food and disrupted sleep. Fitness isn't a separate emergency-prep category so much as the physical capacity that makes every other category actually executable. An injury from poor lifting technique, or exhaustion from attempting a task the household isn't conditioned for, can disable a household as effectively as the disaster itself.

As with the Access & Functional Needs chapter, treat this as general guidance: anyone with an existing medical condition, injury, or mobility limitation should adapt this, ideally with input from a doctor or physical therapist, rather than follow it as written.

Tier 1: Short-to-Medium Term (Hours – 14 Days)

Goal: *Maintain the physical capacity to safely perform immediate survival tasks (evacuation on foot, lifting and clearing debris, carrying an injured person) without adding a second injury to the emergency.*

Tier 1 isn't about building fitness; it's about not getting hurt using whatever fitness you already have, under stress, fatigue, and possibly caloric restriction. Most exercise-related injuries during an actual emergency come from bad technique under pressure, not from a lack of underlying strength.

Skills to Build

- **Safe Lifting Technique:** Lift with the legs and hips, not the lower back: bend the knees, keep the load close to the body, and avoid twisting while lifting. This single habit prevents a large

share of the debris-clearing and heavy-carrying injuries that happen in the first hours after a disaster. See the Physical Readiness for Emergencies skill guide for the full technique.

- **Effort Pacing:** Under caloric restriction (see the Water and Food chapters' rationing guidance), sustained physical output drops. Pace heavy tasks accordingly rather than working at a normal-diet pace and burning out or injuring yourself partway through. The inverse matters just as much: genuinely heavy, sustained manual labor, felling and splitting wood all day, hand-digging, extended construction or rebuilding work, runs well above the standard USDA activity tiers' roughly 3,000-calorie ceiling, documented occupational data puts construction-level labor at roughly 3,500 kcal/day and extreme sustained exertion as high as 6,000 to 7,000. Budget food accordingly for anyone doing that kind of work for real, not the sedentary or lightly active figure most calorie guidance defaults to. See the Calorie Planning for Your Food Supply skill guide for the full activity-tier breakdown.
- **Pre-Exertion Warmup:** Even a 2–3 minute warmup (light movement, dynamic stretching) meaningfully reduces strain and sprain risk before a sudden bout of heavy lifting or fast movement. Worth the time even when it feels like there isn't any to spare.
- **Recognizing Overexertion:** Know the early signs of heat exhaustion, hypothermia, and simple overexertion (dizziness, nausea, disproportionate fatigue) before they progress. Cross-reference the Shelter & Structural Safety chapter's Regional Hazards section and the Medical Care chapter for treatment.

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The **Fitness Addendum** builds these into real, tested competency.

For the hands-on how-to:

Physical Readiness for Emergencies

Tech & Equipment

- **Broken-In Footwear:** Comfortable, already broken-in shoes or boots in the go-bag. New or ill-fitting footwear causing blisters can genuinely disable an evacuation on foot. Don't let the first time you wear evacuation footwear be during an actual evacuation.
- **Properly Sized Pack:** A pack fitted to actually carry weight on the hips, not just the shoulders. An improperly loaded or fitted pack turns a manageable hike into a shoulder and back injury.

- **Blister/Chafing Prevention:** Moleskin, blister pads, and anti-chafe balm. Small, cheap items that prevent a disproportionately large mobility problem.

Materials & Supplies

Item	Quantity / Spec	Notes
Broken-in footwear	1 pair per person, go-bag staged	Worn periodically to stay broken in, not left new in the closet.
Blister/chafing supplies	Moleskin, pads, anti-chafe balm	Cross-reference the Medical Care chapter's first aid kit; keep a set specifically with the go-bag too.
Electrolyte supplies	Oral rehydration salts or electrolyte mix	Physical exertion under stress increases fluid/electrolyte loss beyond normal daily needs. Cross-reference the Water chapter's hydration guidance.

Quick Checklist

- [ ] Every adult can demonstrate correct lifting technique (legs/hips, not back)
- [ ] Go-bag footwear broken in through actual periodic use, not brand new
- [ ] Blister/chafing prevention supplies in the go-bag
- [ ] Household understands effort pacing under caloric restriction
- [ ] Overexertion, heat exhaustion, and hypothermia signs known by every adult
- [ ] Practiced: at least one loaded-pack walk completed to test footwear and pack fit before an emergency

Tier 2: Extended (2 Weeks – 3 Months)

Goal: *Build and maintain functional strength and endurance for sustained manual labor (hauling water and fuel, operating manual tools) without gym access.*

Tier 2 assumes daily life now includes real physical labor that most households aren't normally conditioned for: hauling water in Water's Tier 2 barrels, working the Energy & Heat chapter's manual tools, or simply walking farther and carrying more than usual. This tier is about building the specific, functional capacity those tasks require.

Skills to Build

- **Functional Bodyweight Training:** Build strength around the movement patterns that actually transfer to survival tasks: squats (lifting), hip hinges (lifting from the ground), push-ups (pushing/pressing), and loaded carries (literally practicing carrying weight, which is one of the most directly transferable exercises to hauling water or supplies). See the Physical Readiness for Emergencies skill guide for the full routine.
- **Rucking:** Walking with a weighted pack: a well-established, low-equipment training method that directly builds the specific endurance needed for a loaded evacuation on foot or daily hauling trips. Start light (10% of body weight is a reasonable starting point) and increase gradually. See the Physical Readiness for Emergencies skill guide for progressive loading.
- **Basic Injury Management:** Current sports-medicine guidance has moved past the old “RICE” (Rest, Ice, Compression, Elevation) approach in favor of PEACE & LOVE: in the first 48 hours, Protect the injury, Elevate it, Avoid anti-inflammatory medication when possible (it can slow tissue healing), use Compression, and Educate yourself on realistic recovery time; after that acute phase, focus on Load (gradual, tolerable movement), Optimism, Vascularization (light cardio to promote blood flow), and Exercise (progressive rehab). Complete rest and ice alone are no longer considered the best approach for most soft-tissue injuries.
- **Recovery Management:** Sleep and adequate food intake are part of physical capacity, not separate from it. Cross-reference the Water, Food, and Mental Health chapters; a household running a caloric or sleep deficit will see real strength and endurance losses regardless of training.

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Physical Readiness for Emergencies

Tech & Equipment

- **Resistance Bands:** Lightweight, inexpensive, and versatile; shared equipment with the Mental Health chapter’s Tier 2 supplies.
- **Weighted Pack/Rucksack:** For rucking training; can simply be a normal pack loaded with water jugs or sandbags rather than a dedicated purchase.

- **Jump Rope:** Compact, cheap cardio equipment requiring no other space or equipment.

Materials & Supplies

Item	Quantity / Spec	Notes
Training log	Simple notebook	Tracking load and frequency prevents the two most common training mistakes under stress: doing too much too soon, or not progressing at all.
Basic injury supplies	Compression wraps, elevation-friendly setup	Supports the PEACE & LOVE protocol above; cross-reference the Medical Care chapter's trauma supplies.

Quick Checklist

- [ ] Functional bodyweight routine (squat, hinge, push, carry) established and practiced regularly
- [ ] Rucking practiced with a loaded pack at a realistic training weight
- [ ] PEACE & LOVE injury protocol understood in place of outdated RICE guidance
- [ ] Recovery (sleep, nutrition) treated as part of the fitness plan, not separate from it
- [ ] Practiced: household has completed physical labor tasks (hauling water/fuel) using correct technique under realistic conditions

Tier 3: Permanent (Indefinite)

Goal: Sustain physical capacity through the demands of daily survival labor itself, while preventing the long-term overuse injuries that come with sustained manual work.

By Tier 3, physical conditioning largely comes from the work itself: farming, hauling, construction, food preservation, rather than dedicated exercise time. The focus shifts from building fitness to protecting it: preventing repetitive strain, recognizing when age or cumulative injury genuinely limits what a person can safely do, and keeping the whole household capable over years, not weeks.

Skills to Build

- **Movement Self-Assessment:** Recognize the early signs of overuse injury (persistent joint pain, recurring strain in the same area) before they become disabling. Early attention prevents most

chronic injuries; ignoring early signals is what turns them chronic.

- **Teaching Correct Form:** Actively teach proper lifting and movement technique to other household and community members. An injury from one person's bad form doing shared heavy labor affects everyone who depends on that labor.
- **Work-Integrated Conditioning:** Deliberately vary daily labor tasks to avoid the same repetitive movement pattern every day. Rotating between different physical tasks (digging, hauling, building) reduces overuse injury risk compared to the same motion repeated for months.
- **Realistic Capacity Assessment:** Honestly match tasks to what each person can currently do. Pushing an aging or previously-injured household member to match a younger person's physical output is how a minor limitation becomes a serious injury. Cross-reference the Access & Functional Needs chapter's guidance on this.

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Physical Readiness for Emergencies

Tech & Equipment

- **DIY Strength Equipment:** Filled sandbags, water jugs, or containers filled with rocks/sand function as genuine strength training equipment with zero cost beyond containers already on hand.
- **Basic Mobility Tools:** A simple stretching/mobility routine requires no equipment at all, but a yoga mat or padded surface makes it more likely to actually happen consistently.

Materials & Supplies

Item	Quantity / Spec	Notes
DIY weight-training materials	Sand, rocks, sturdy containers	Zero ongoing cost beyond what's already on hand.
Joint/mobility support	Compression wraps, supportive footwear	Preventive, not just reactive; cheaper to prevent an overuse injury than treat one without professional care.

Quick Checklist

- [ ] Household actively watches for and addresses early overuse-injury signs
- [ ] Correct lifting/movement technique taught to others, not just known individually
- [ ] Daily labor tasks rotated to avoid repetitive strain from a single movement pattern
- [ ] Task assignments realistically matched to each person's current physical capacity
- [ ] DIY strength equipment (sandbags, filled containers) in regular use
- [ ] Practiced: household has gone a full season without a preventable overuse injury

Tier 4: Sustainable Community

Goal: *Build community-wide physical capacity so heavy labor, defense, and construction work aren't limited by, or dependent on, any single household's strength or stamina.*

A single household's Tier 3 physical capacity is still a hard ceiling: there's only so much heavy labor a few people can sustainably do. Tier 4 pools physical capability across the community: shared heavy labor, task-matching across a wider range of abilities, and training that builds capacity across more people rather than concentrating it in whoever happens to be strongest.

Name the actual labor-intensive work the neighborhood genuinely faces, security patrol, construction, hauling, before building a rotation around it, not a vague sense that "shared labor" is good. Then count the real capacity against it: how many willing, able people actually exist across the full range of ages and abilities, not just the few who happen to be strongest right now. A few strong people are a hard ceiling on what a community can do; a rotation sized to rely on them indefinitely will fail exactly when one of them is hurt, aged out, or gone.

Choosing an Approach

Three real models fit different circumstances.

Approach	What it is	Fits when
Informal mutual-aid	Neighbors pitching in on heavy tasks as they come up, no schedule or formal roles	A small trusted group, or occasional, unpredictable need
Task-matched rotation	A documented roster matching specific tasks to specific people's actual abilities, rotated to prevent burnout	Real, recurring labor-intensive work and enough willing people to actually staff a rotation
Dedicated conditioning program	Regular shared training sessions plus a formal rotation and succession planning for aging-out or injured roles	Sustained need and someone willing to run training consistently, not as a one-time session

Skills to Build

- **Becoming a Certified Trainer:** NASM or ACE's Certified Personal Trainer program, both NCCA-accredited and requiring current CPR/AED certification, builds genuinely deeper programming knowledge than following a template routine, worth it once training and programming for others is becoming a real skill you use regularly. Certified Athletic Trainer is a graduate-level path, a master's degree from an accredited program plus extensive supervised clinical experience, the real ceiling for injury-management expertise, well beyond this chapter's casual scope. Practice distinguishing normal training soreness from the early signs of a genuine overuse injury, and teach correct form to at least one other person, not just yourself, since this is the skill that actually spreads beyond one household. Difficulty: High. Training: NCCA-accredited certification program. Cost: $$-$$$.
- **Community Work Rotation:** Rotate heavy-labor duties across willing, able community members rather than letting the same few people carry the physical load indefinitely, the same burnout-prevention principle used for caregiving and security watch duty in earlier chapters.
- **Group Training Sessions:** Regular, shared physical training builds both capability and social connection. Ties directly into the Mental Health chapter's guidance on community connection as a protective factor during prolonged stress.
- **Ability-Based Task Matching:** Formally match tasks to the full range of physical abilities across the community: heavy construction for those capable of it, equally valuable lighter-duty or skill-based roles for those who aren't, rather than an all-or-nothing expectation. This builds directly on the Access & Functional Needs chapter's inclusive-planning principle.
- **Physical Role Succession:** Plan for what happens to labor-intensive roles (security patrol, construction, hauling) as the people currently filling them age, are injured, or are lost, the same redundancy principle used for medical, radio, and caregiving roles throughout this manual.

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Physical Readiness for Emergencies

Tech & Equipment

- **Shared Community Training Space:** A common area for group training sessions. Doesn't need to be elaborate, just consistent and accessible.
- **Shared Heavy Tools:** Tools genuinely requiring multiple people to operate safely or effectively (two-person saws, heavy hauling equipment). Pooled community resources rather than household-by-household duplication.

Materials & Supplies

Item	Quantity / Spec	Notes
Community DIY equipment	Shared sandbags, weighted containers	Scaled-up version of the Tier 3 household equipment.
Labor rotation schedule	Documented, regularly updated	Same model as the shared duty rosters in the Security & Self-Defense and Access & Functional Needs chapters.

Quick Checklist

- [ ] Heavy-labor duties formally rotated across the community, not concentrated in a few people
- [ ] Regular group training sessions held
- [ ] Tasks matched to the full range of physical abilities in the community, not an all-or-nothing standard
- [ ] Succession plan in place for physically demanding community roles
- [ ] Shared heavy tools and training space established
- [ ] Headcount and real labor-intensive need assessed before building a rotation

- [ ] At least one household member pursuing NASM/ACE Certified Personal Trainer certification, if community need is real
- [ ] Practiced: a full community labor rotation has run at least one complete cycle

At a Glance: Fitness Across All Tiers

A single-page reference for planning purposes. This does not replace the detailed guidance above, and anyone with an existing medical condition or injury should adapt this plan with a doctor or physical therapist's input.

Tier	Duration	Primary Focus	Key Practice
Tier 1	Hours – 14 days	Injury prevention under stress	Safe lifting technique, broken-in footwear
Tier 2	2 weeks – 3 months	Functional strength/endurance building	Rucking, bodyweight training, PEACE & LOVE
Tier 3	Indefinite	Sustaining capacity through daily labor	Task rotation, realistic capacity matching
Tier 4	Sustainable community	Distributed community labor capacity	Work rotation, ability-based task matching