



# in our own backyard

THE HIDDEN PROBLEM OF  
CHILD FARMWORKERS IN AMERICA  
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## Part III: What Can Be Done?

### **NIOSH Recommendations**

In 2002, the National Institute for Occupational Safety and Health issued a report that recommended changes to regulations on youth labor. The Child Labor Coalition analyzed the recommendations in its 2005 report Protecting Working Children in the United States: Is the Government's Indifference to the Safety and Health of Working Children Violating an International Treaty?

*Source: Child Labor Coalition,  
<http://www.stopchildlabor.org/pressroom/clc%20report.pdf>*



## Protecting Working Children in the United States: Is the Government's Indifference to the Safety and Health of Working Children Violating an International Treaty?

### 3. May 2002 NIOSH Report Recommending Changes in Child Labor Hazardous Orders

One of the most important developments since the ratification of ILO Convention 182 has been the publication in May 2002 of a comprehensive report entitled *National Institute for Occupational Safety and Health (NIOSH) Recommendations to the U.S. Department of Labor for Changes to Hazardous Orders* ("NIOSH Report").

The NIOSH Report sets forth 38 specific recommendations for changing existing child labor HOs and adding new regulations in order to reduce substantially the annual toll of 67 deaths and 200,000 injuries to working children.<sup>23</sup> However, in the more than three years since the NIOSH Report was issued, DOL has taken no action whatever to update the HOs relating to agriculture,<sup>24</sup> even though, as discussed below, agriculture is considered one of the most dangerous industries in which children work.

#### ***NIOSH Recommendations Relating to Child Labor Hazardous Orders in Agriculture***

The NIOSH Report indicates that during the period from 1992 through 1997, a total of 403 children under age 18, or an average of 67 youths per year, were killed while working.<sup>25</sup> The industry that had by far the highest number of fatalities — 162, or 40 percent — was agriculture, forestry, and fishing, even though only 13 percent of children under age 18 who work are in this sector of the economy.<sup>26</sup> This high rate of fatal injuries in agriculture is confirmed by the fact that youth 15- to 17-years-old working in agriculture appear to have over four times the risk for fatal injury of youth workers in other industries.<sup>27</sup> Of the 162 occupational deaths of children in agriculture, nearly a third (51) were associated with tractors.<sup>28</sup> These

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23 NIOSH Report, pp. 7, 10.

24 The limited action that DOL has taken in response to the NIOSH Report affects only 4 HOs, none of which relates to agriculture. DOL's changes to these 4 HOs are explained after this discussion of agricultural HOs.

25 NIOSH Report, p. 10. As noted in footnote 14 above, the agricultural HOs do not apply to a child employed by a parent or guardian on a farm owned or operated by the parent or guardian. Children on such farms can therefore do work that DOL has determined to be particularly hazardous. It is not known with certainty how many of the 403 deaths reported in the NIOSH Report occurred to children working on their own family's farms. However, researchers from DOL's Bureau of Labor Statistics have suggested that more than half of the farming-related deaths of youth less than 18 years of age occurred on farms owned by the victim's families (NIOSH Report, pp. 143-144).

26 NIOSH Report, p. 11 (Table 3).

27 NIOSH Report, p. 12.

28 NIOSH Report, p. 12.

are among the key reasons why agricultural jobs are so hazardous to working children.

The NIOSH Report also discusses nonfatal occupational injuries and illnesses to children under age 18. The report indicates that the total number of such injuries and illnesses may exceed 200,000 per year, and that youth work injuries in agriculture tend to be more severe than injuries in other employments.<sup>29</sup>

For all of these reasons, DOL's failure to propose any changes in the agricultural HOs is particularly disturbing. We discuss below some (but by no means all) of the key NIOSH Report data and recommendations relating to agriculture, which have been consistently ignored by DOL since publication of the Report in May 2002.

Operating tractors. NIOSH data for 1998 show 3,069 non-fatal injuries from tractors for youth under age 16, of which 2,185 injuries occurred when the child was operating the tractor at the time of injury. In 44 percent of the injuries, the youth was using the tractor for tilling purposes at the time of injury.<sup>30</sup> Most injuries and deaths are caused by tractor overturns.<sup>31</sup> NIOSH notes that tractors equipped with rollover protective structures (ROPS, which are canopies or roll bars that protect the tractor operator) and with seatbelts result in greatly enhanced safety. NIOSH estimates that if all tractors were required to have ROPS, rollover fatalities would decrease by 71 percent. And if seat belts were also universally required on tractors, NIOSH estimates that there would be almost no fatalities from tractor rollovers.<sup>32</sup>

Existing agricultural HO 1 does not require that tractors be equipped with ROPS or with seat belts, and even where a tractor has a seat belt, HO 1 does not require that it be used.<sup>33</sup> Instead, HO 1 simply forbids children under age 16 from operating a tractor of more than 20 power take-off (PTO) horsepower, or from connecting or disconnecting an implement or any of its parts to or from such a tractor. (PTO refers to a supplementary mechanism enabling the tractor's engine power to be used operate non-automotive apparatus, such as a winch or grinder.) Moreover, under a special exemption in DOL's child labor regulations, children as young as age 14 can operate tractors and connect and disconnect implements if they have attended a specified tractor or machinery program.<sup>34</sup>

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29 NIOSH Report, p. 7.

30 NIOSH Report, p. 69. As noted in footnote 14 above, the agricultural HOs do not apply to a child employed by a parent or guardian on a farm owned or operated by the parent or guardian.

31 NIOSH Report, pp. 67, 69.

32 NIOSH Report, p. 71.

33 29 C.F.R. 71(a)(1). A regulation issued by DOL's Occupational Safety and Health Administration (OSHA) requires that all tractors manufactured after October 25, 1976, be equipped with ROPS (29 C.F.R. 1928.51(b)(1)). However, because tractors are extremely durable, many of them manufactured before that date are still in use. OSHA also requires that tractors manufactured after October 25, 1976, have seatbelts, and that employers assure that workers use the seatbelts while the tractor is moving (29 C.F.R. 1928.51(b)(2)).

34 29 C.F.R. 570.72.

In order to reduce tractor-related deaths and injuries to children, *NIOSH recommends that the exemption permitting children under age 16 to use tractors be strengthened by requiring that the tractors used by these children must be equipped with ROPS and by mandating the use of seat belts.*<sup>35</sup> Moreover, because most tractors equipped with PTO exceed the 20 PTO horsepower limit and because the actual PTO horsepower is often difficult to ascertain readily, *NIOSH recommends that this requirement be eliminated, so that no child under age 16 could operate or attach implements to any tractor equipped with PTO (except a child under age 16 who had received the requisite training).*<sup>36</sup>

Operating agricultural machinery. Data examined by NIOSH for 1998 show an estimated 3,035 machinery-related injuries to youth under age 16.<sup>37</sup> Existing agricultural HOs 2 and 3<sup>38</sup> list specific types of machinery, which youth under age 16 are prohibited from operating or assisting to operate, but many new types of machinery have been introduced on farms since 1970, when the agricultural HOs were last revised. *NIOSH recommends that the list of prohibited machinery be broadened by specifying general functions that prohibited machines perform (e.g., "harvesting and threshing machinery"), rather than listing each prohibited machine by name (e.g., "corn picker; cotton picker").*<sup>39</sup>

Working at heights. NIOSH data for 1998 show 11,334 injuries to youth under age 16 due to falls from elevation.<sup>40</sup> Existing agricultural HO 6 forbids a youth under age 16 from working from a ladder or scaffold at a height of over 20 feet.<sup>41</sup> NIOSH findings show that many of the youth who were injured in falls fell not from a ladder or scaffold, but from equipment, from vehicles, from trees, and from hay bales.<sup>42</sup> Moreover, although most death and injury reports do not show the height from which workers fell, those reports which contain such data show that in 22 of 38 fatality incidents, the worker fell from 20 feet or less.<sup>43</sup> On the basis of this information, *NIOSH recommends that the HO be revised (a) to forbid work by youth under age 16 not only on ladders and scaffolds, but also on roofs; farm structures, including silos, grain bins, windmills, and towers; and vehicles, machines, and implements; and (b) to reduce the maximum height from 20 feet to 6 feet.*<sup>44</sup>

Driving motor vehicles in agricultural settings. Data available to NIOSH for 1998 show 5,444 vehicle-related injuries to youth under age 16 on farms. The majority of

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35 NIOSH Report, pp. 67, 71.

36 NIOSH Report, p. 70.

37 NIOSH Report, p. 75.

38 29 C.F.R. 570.71(a)(2) and (a)(3).

39 NIOSH Report, p. 72.

40 NIOSH Report, p. 81.

41 29 C.F.R. 570.71(a)(6)

42 NIOSH Report, p. 81.

43 NIOSH Report, p. 80.

44 NIOSH Report, p. 79.

injured youth (73.9 percent) were operating the vehicle.<sup>45</sup> Existing agricultural HO 7 bars youth under 16 from driving “a bus, truck, or automobile,” and only when the youth who is driving the specified vehicle is transporting passengers.<sup>46</sup> NIOSH findings show that nearly half (47.4 percent) of the 5,444 vehicle-related injuries involved not buses, trucks, or automobiles, but all-terrain vehicles (ATVs). These data include injuries when children are using ATVs for recreational purposes, but a 1997 survey found that the use of ATVs for nonrecreational purposes such as farming or ranching has increased in recent years. Moreover, the American Academy of Pediatrics has recommended that states prohibit all use of ATVs by person less than 16 years old.<sup>47</sup> NIOSH also points out that there are not enough data to ascertain the extent to which passengers affect the death rate of youth motor vehicle drivers.<sup>48</sup> In view of these findings, *NIOSH recommends that agricultural HO 7 be revised to prohibit driving of all motor vehicles and off-road vehicles (including ATVs), with or without passengers, on and off the highway.*<sup>49</sup>

*Handling or applying toxic pesticides.* NIOSH cites studies by the Environmental Protection Agency and other sources estimating 10,000 - 20,000 physician-diagnosed pesticide illnesses annually to agricultural workers of all ages in the United States. Moreover, because officially-reported pesticide-related illness is far lower than the true number, the actual number of such illnesses in agriculture has been estimated at over 300,000 per year.<sup>50</sup> In the case of workers under the age of 18, the incidence of acute occupational pesticide-related illness is 1.71 times that of working adults aged 25 - 44 years.<sup>51</sup> The most hazardous employment for children is in agriculture, where 62 percent of the acute illnesses occurred.<sup>52</sup> In light of these severe hazards, *NIOSH recommends that existing agricultural HO 9 be strengthened so that it forbids children under age 16 from handling or applying pesticides not only of Toxicity*

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45 NIOSH Report, p. 84.

46 29 C.F.R. 570.71(a)(7).

47 NIOSH Report, pp. 84-85. The staff of the U.S. Consumer Product Safety Commission (CPSC) has recommended that the CPSC not ban the sale of new, adult-sized ATVs for use by children under age 16. The staff stated that a sales ban would primarily address how ATVs are sold, rather than how they are used after they are purchased. This is because the CPSC does not have the power to regulate how consumers use a product. (Federal Register, volume 70, no. 28, pp. 7248-7249 (February 11, 2005)). Regardless of the final action taken by the CPSC on its staff's recommendation, the CLC notes that DOL, unlike the CPSC, does have the power under the FLSA child labor provisions to regulate this matter. DOL should propose and adopt a new or revised HO that would forbid employers from allowing children to drive ATVs. The great hazards to children who operate ATVs are amply demonstrated in the CPSC staff report. In 2003, of the 407 fatalities involving ATVs, 111 (27 percent) were suffered by children under age 16. In the same year, of the 125,500 nonfatal injuries involving ATVs, about 31 percent affected children under age 16 (*Washington Post*, February 8, 2005, p. A8).

48 NIOSH Report, p. 84.

49 NIOSH Report, pp. 81-82.

50 NIOSH Report, pp. 92-93.

51 NIOSH Report, p. 93.

52 NIOSH Report, p. 93.

*Categories I and II, but III and IV as well.*<sup>53</sup> In support of this recommendation, NIOSH points out that where the Toxicity Category of pesticides is recorded in reports of illnesses to children working in agriculture, 67 percent of the cases were associated with Category III pesticides, which are not covered by the current HO.<sup>54</sup>

The above are just several examples of detailed data in the NIOSH Report that show serious hazards to which youth working in agriculture are exposed. **DOL has taken no significant steps to protect children from these hazards, and it has also ignored numerous important NIOSH recommendations affecting non-agricultural employment.** DOL's indifference calls into question its commitment to its Congressional mandate to protect America's working youth.

#### ***DOL Changes in Child Labor Hazardous Orders***

The four changes made by DOL to existing HOs took effect on February 14, 2005. Two of these changes were mandated by Congressional amendments to the FLSA, one in 1996 (relating to loading materials by 16- and 17-year-olds into scrap paper balers and paper box compactors)<sup>55</sup> and the other in 1998 (relating to driving motor vehicles by 17-year-olds on public highways).<sup>56</sup> Thus it took DOL eight and one-half years and more than six years, respectively, to issue regulations implementing these two statutory amendments.

Moreover, of the four changes that DOL has made to the HOs, only two of them are fully in accord with the NIOSH report's recommendations (HO 1, relating to work done where explosives are manufactured or stored, has been amended to broaden the definition of explosives; and HO 2, relating to driving trucks and vehicles on public highways, has been changed as recommended by NIOSH to comply with

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53 NIOSH Report, p. 90. Existing agricultural HO 9 applies only to Toxicity Categories I and II. Expanding it to cover Toxicity Categories III and IV as well would make agricultural HO 9 consistent with protections for pesticide handlers in the EPA's Worker Protection Standard for pesticides (40 C.F.R. Part 170). Pesticides of Toxicity Categories I and II have an acute toxicity which can cause rather quick symptoms such as blurred vision, cardiac arrhythmias, and paralysis, whereas Toxicity Category III and IV pesticides have chronic effects which typically take longer to manifest themselves, such as sterility, blood disorders, and abnormal liver and kidney function (NIOSH Report, pp 94-95).

54 NIOSH Report, p. 93.

55 29 U.S.C. 213(c)(5), added by Public Law 104-174 (110 Stat. 1553), effective August 6, 1996. Until Congress added this amendment to the FLSA, HO 12 (29 C.F.R. 570.63) barred any child under age 18 from doing such work (except for certain apprentices and student learners).

56 29 U.S.C. 213(c)(6), added by Public Law 105-334, section 2(b)(112 Stat. 3137), effective October 31, 1998. Until Congress added this amendment to the FLSA, HO 2 (29 C.F.R. 570.52) barred any child under age 18 from doing such work (except in the case of incidental and occasional driving).

the 1998 Congressional amendments to FLSA).<sup>57</sup>

The other two changes made by DOL to the HOs omit key recommendations urged by the NIOSH Report. First, the baler and compacter restrictions that DOL has established apply only to those machines that bale and compact paper products, or paper products and other materials (such as aluminum cans, plastic, and foam); accordingly, DOL explains, the new regulation does not bar children under age 18 from loading, operating or unloading “those machines that process everything and anything but paper products.”<sup>58</sup> DOL’s failure to bar such work is indefensible, given extensive data in the NIOSH Report pointing to the great hazards of all balers and compactors.<sup>59</sup> Of the deaths caused by balers and compactors, only 38 percent are caused by those machines that process paper and cardboard, whereas the majority of deaths involved balers and compactors for non-paper products, such as scrap metal, trash, cans, plastic wrap, and cotton.<sup>60</sup> Moreover, as NIOSH notes, balers and compactors for metal products often feature shear blades that may not be present on lighter-duty machinery.<sup>61</sup>

DOL, ignoring these serious dangers, says that it has not made a determination that use of these non-paper balers and compactors by 16- and 17-year-olds is particularly hazardous, adding that it “will continue to review this matter and may consider future rulemaking to further revise” the HO.<sup>62</sup> What is shocking about this statement is that despite NIOSH’s strong evidence about the danger working with balers and compactors for metal and other material besides paper and boxes, DOL has not only failed to amend the HO this time, but has also failed to commit itself to promptly issuing a proposed change in the regulation and soliciting comments from interested parties.

The second change made by DOL that fails to follow key NIOSH recommendations relates to roofing operations. DOL has improved the protections of the roofing HO by expanding prohibited work beyond construction, maintenance and repair of roofs (as the old HO provided) to now include all work on or about roofs (including installation, maintenance and repair of television and microwave antennas, air conditioning equipment, and gutters and downspouts).<sup>63</sup>

However, DOL has not abolished the exemption to this HO, which permits children under age 18 who are apprentices or student-learners to engage in these hazardous activities on or about roofs. This approach completely ignores the strong

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57 On HO 1, compare 69 Fed.Reg. 75403 (to be codified in 29 C.F.R. 570.51) with NIOSH Report, pp. 21-22. On HO 2, compare 69 Fed.Reg. 75403 (to be codified in 29 C.F.R. 570.52) with NIOSH Report, pp. 22-26.

58 69 Fed.Reg. at 75397.

59 NIOSH Report, pp. 50-54.

60 NIOSH Report, p. 51.

61 NIOSH Report, p. 52.

62 69 Fed.Reg. at 75397.

63 69 Fed.Reg. 75404 – 75405.