

Table 2. **Association of iron with morbidity**

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**Iron, by itself, can initiate the condition**

arrhythmia<sup>6</sup> cardiomyopathy<sup>7</sup> growth deficiency<sup>8</sup> hemophilic synovitis<sup>9</sup>  
hypogonadism<sup>10</sup> lung cancer<sup>11</sup> osteoporosis<sup>12</sup> pneumoconiosis<sup>13</sup>  
teratogenicity<sup>14</sup>

**Iron can be a cofactor in promoting the condition**

Alzheimer's<sup>15</sup> atherosclerosis<sup>16</sup> bacterial infections<sup>3</sup> diabetes<sup>17</sup>  
endometriosis<sup>18</sup> esophageal adenocarcinoma<sup>19</sup> fungal and protozoan  
infections<sup>20</sup> gout<sup>21</sup> hepatoma<sup>22</sup> multiple sclerosis<sup>23</sup> osteoarthritis<sup>24</sup> oto- and renal  
toxicity<sup>25</sup> ozone lung injury<sup>26</sup> peripheral neuropathy<sup>27</sup> viral infection<sup>28</sup>

**Iron deposits are observed in condition-associated tissues sites**

basal ganglia in PKAN<sup>29</sup> bronchoalveolar fluid in PAP<sup>30</sup>  
hepatocytes in cirrhosis/NAFLD and viral hepatitis<sup>31</sup> lens in cataract<sup>32</sup>  
microglia in Huntington's<sup>33</sup> mitochondria in Friedreich's ataxia<sup>34</sup>  
pulmonary secretions in cystic fibrosis<sup>35</sup> retina in macular degeneration<sup>36</sup>  
skeletal muscle in aging<sup>37</sup> skin cells in rosacea<sup>38</sup> soft tissue in Kaposi's sarcoma<sup>39</sup>  
substantia nigra in Parkinson's<sup>40</sup> thyroid in hypothyroidism<sup>41</sup>

**Body iron loading is associated with above normal incidence of condition**

amyotrophic lateral sclerosis<sup>42</sup> breast cancer<sup>43</sup> colorectal cancer<sup>44</sup>  
depression<sup>45</sup> Down syndrome<sup>46</sup> epilepsy<sup>47</sup> gestational diabetes<sup>48</sup>  
GRACILE syndrome<sup>49</sup> hypertension<sup>50</sup> inflammatory bowel disease<sup>51</sup> ischemic  
stroke<sup>52</sup> leukemia<sup>53</sup> pre-eclampsia<sup>54</sup> porphyria cutanea tarda<sup>55</sup> prion disease<sup>56</sup>  
sudden infant death syndrome<sup>57</sup> venous leg ulcer<sup>58</sup>

**Maternal antibodies can impair fetal iron metabolism**

Fetal or neonatal death in neonatal hemochromatosis<sup>59</sup>

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